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ABSTRACT

This report of recommendations describes in detail the system for determining communication/language objectives (C/LOBS) within an instructional systems development (ISD) framework. C/LOBS was developed to support the front-end analysis efforts of the Defense Language Institute Foreign Language Center and functions as a subsystem of the ISD approach currently in use in the TRADOC school system. The task assigned to this project, which is described in 13 volumes and an executive summary, was to develop a systematic set of procedures for determining terminal skill objectives (TSOs) and their supporting enabling objectives (EOs) for foreign language training. Five job/duty positions and three languages were selected for field testing and system validation. In this volume the C/LOBS is described in terms of its three phases: (1) the task analysis system, (2) the TSO conversion routine, and (3) the EO system. Each system phase is discussed in terms of the system components, the methodologies employed during the three phases, and the tools required to carry out the C/LOBS. Examples of the outputs of each phase are provided in the individual sections. (SW)

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METHOD FOR DETERMINING LANGUAGE OBJECTIVES AND CRITERIA

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VOLUME I

A COMMUNICATION/LANGUAGE OBJECTIVES-BASED SYSTEM (C/LOBS) FOR FOREIGN LANGUAGE TRAINING

A study conducted under contract number
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Midtown Plaza, 700 East Water Street, Syracuse, New York 13210

FL 010 789

Report A005-WU 35114

METHOD FOR DETERMINING LANGUAGE OBJECTIVES AND CRITERIA

VOLUME I

A COMMUNICATION/LANGUAGE OBJECTIVES-BASED SYSTEM (C/LOBS) FOR FOREIGN LANGUAGE TRAINING

Contract Monitor

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25 May 1979

FINAL REPORT OF RECOMMENDATIONS

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SECTION I: INTRODUCTION

This Report of Recommendations describes in detail the system for determining communication-language objectives within an instructional system development (ISD) framework. It is a front-end analysis system that functions as a subsystem of the ISD approach currently used by TRADOC schools. It is in accord with the principles set forth in the Interservice Procedures for Instructional Systems Development (TRADOC Pam 350-30). It is an objectives-based system.

BACKGROUND

Objectives-based systems (OBS) are widespread. OBS models guide the development of school math programs, reading programs, social studies--even music, art, and sports. Industrial training is almost always objectives-based. The military assesses training effectiveness in terms of performance objectives. Even models for determining foreign language objectives have begun to appear (Vallette & Disick, 1972.

In an educational setting, language objectives-based systems (LOBS) provide sufficient focus to permit the development of general language-learning curricula. In a training environment, where job and task specificity is paramount, the functional purposes of language are critical factors. These purposes are uncovered through an analysis of the communicative needs of the job holder. The front-end analysis must, therefore, determine the communicative requirements as well as delineate the language requirements. The front-end system must be a communication/language objectives-based system (C/LOBS). Only from an analysis of the combined elements of communication and language can adequate objectives be derived.

The present approach is a C/LOBS. It has the power to adequately determine, delineate, and describe the training requirements for language learning in specific work settings. It meets the requirement of focusing language training on job tasks. It meets the requirement of guiding instructional development toward job performance.

PROJECT OVERVIEW

The purpose of this project was to develop a systematic set of procedures for determining the Terminal Skill Objectives (TSOs) and their supporting Enabling Objectives (EOs) for use by the DLIFLC in designing instruction within a systems-engineered learning environment. The focus of this system is to produce graduates prepared for job entry or requisite follow-on training conducted by User Agencies.

The five tasks listed below outline the major divisions of work required during the course of this project.

Task 1.0 Determine the target languages and job/duty positions that reflect significantly different contexts and job types.

Task 2.0 Determine the task analysis procedures for delineating the required foreign language skills

Task 3.0 Determine the procedures for and develop the Terminal Skill Objectives (TSOs).

Task 4.0 Develop the procedures and delineate the Enabling Objectives (EOs) for the three languages and five job/duty positions.

Task 5.0 Produce a document, the Report of Recommendations, sufficiently detailed to provide guidance to DLIFLC personnel in performing the following activities: task analysis, development of TSOs, delineation of EOs, and evaluation of the necessity and sufficiency of the EOs for achievement of the TSOs.

The outcomes of the work performed to accomplish these tasks are the C/LOBS and its supporting documentation, examples of output, and the tools provided in

this Report of Recommendations. In this volume the C/LOBS is described in terms of its three phases: (1) the task analysis system; (2) the TSO conversion routine; and (3) the EO system. Each system phase is discussed in terms of the system components, the methodologies employed during the three phases, and the tools required to carry out the C/LOBS. Examples of the outputs of each phase are provided in the individual sections. The remaining twelve volumes provide the methodological tools, conceptual tools, the task analyses of the five job/duty positions, and the linguistic analyses of the three target languages.

SECTION II: TASK 1.0

Task 1.0 Determine the target languages and job/duty positions that reflect significantly different contexts and job types.

TARGET LANGUAGES

The initial step for determining the languages to be employed as part of the operational domain of this project was taken during the early days of October, 1977. Through discussion with the COTR at DLIFLC Monterey and individual investigations by DLIFLC and the principle investigator for the project, the three languages selected were Russian, Chinese, and Peninsular Spanish. The criteria for selection were:

- The languages must display significant linguistic differences among themselves in order to insure representativeness.
- The languages must reflect a high-density training effort currently being employed by DLIFLC.
- The languages must be currently used in a variety of job/duty positions.
- There must be sufficient numbers of persons currently performing in those duty positions.

Each language, Russian, Chinese, and Spanish, is discussed according to the above criteria. The selection of these particular languages, as it turned out, impacted profoundly on the significance and scope of this project.

Russian

Although a member of the Indo-European family, Russian differs dramatically from English in surface structure, phonology, and morphology. Russian has a number of phonemes not found in the American-English inventory. The student must learn to discriminate between palatalized and non-palatalized consonants. The student of Russian must produce the voiceless counterparts of voiced consonants in final position and before other voiceless consonants. The Russian language abounds in inflectional endings indicating gender, number, and case for nouns. The verbal system has an imperfective-perfective aspectival axis as well as tenses. The

Russian script is based on the Greek alphabet and not the Roman.

The Army Linguist Personnel Study (ALPS), 20 January 1976, places the study of Russian as the highest priority by virtue of numeric needs alone. The number of persons requiring a communicative skill with the Russian language is, consequently, very high.

Chinese

Mandarin Chinese ranked sixth (6th) in the ALPS study of critical languages with respect to Army needs. This language is a member of the Sino-Tibetan language family. Chinese has a phonemic tonal system, in place of elongated stress in English. The sound system is difficult for the native American to master. The writing system is ideographic, differing radically from the phonetically based English system. Mandarin Chinese is the chief dialect of China and is spoken by four-fifths of the country. The standard variety is centered around Peking. This language represents a high density effort at the DLIFLC. The ALPS study projects a shortfall of Chinese linguists both now and through 1981. In this respect, Chinese is considered a critical language for training in order to meet Army-wide linguists' requirements.

Spanish

Spanish is the other Indo-European language employed in this project. Closer to English than either Russian or Chinese, Spanish is considered an "easy" language for an American to learn. The choice of Spanish is optimized by the fact that it differs greatly from the other languages selected. The ALPS study lists Spanish, especially Latin-American Spanish, as high on the list of critical languages. Although Peninsular Spanish is used in this project in an effort to obtain greater MOS variety, the similarities and differences between the two dialects heavily influenced the prerequisites for task analysis output and the procedures for obtaining adequate and sufficient output.

JOB/DUTY POSITIONS

Five job positions were selected for the field testing of the task analysis system, methodology, and procedures. This was accomplished through the COTR, User Agencies, and DEA. The MOS/job positions are:

- 11B Infantryman (Special Forces)--Russian
- 05B Radio Specialist (Special Forces)--Russian
- 91B Medical Specialist (Special Forces)--Russian
- 11BF1 Intelligence/Operations Specialist (Special Forces)--Chinese
- Military Advisory and Assistance Group (MAAG)--Spanish

The MOS job/duty positions were decided upon according to their variety, availability, diversity, and language-requirement criticality.

The mission of the Special Forces requires each MOS holder to be language qualified. Each MOS has specific duties and tasks that make its particular language requirement unique. By the very nature of Special Forces operations, some communicative tasks are shared across MOSs. This combination of shared and exclusive language requirements created an optimal field test and analysis environment, allowing the development of a task analysis methodology that can test generalizability, as well as specialized tracks, in reaching the foreign-language Terminal Skill Objectives.

The MAAG foreign-language requirement, although primarily a speaking need, has a major reading skill requirement that permitted the sampling of a wider range of communicative skills. This range of skills provided this project with an assortment of communicative activities permitting a greater depth of analysis in delineating independent or dependent enabling objectives.

SECTION III: TASK 2.0

Task 2.0 Determine the task analysis procedures for delineating the required foreign-language skills.

The task analysis procedures defined through the work completed during this phase of the project required the design of a task analysis system. This system functions as a subsystem or systems component of the total training system employed by the DLIFLC under the guidelines established by TRADOC. Therefore, prior to defining the procedures, the following steps were accomplished in compliance with the "systems approach."

- Identify and list the design parameters and requirements for the Task Analysis Subsystem.
- Design a Task Analysis Subsystem that integrates system stages and interrelates system functions within those stages.
- Develop a Task Analysis Methodology that responsibly implements the Task Analysis System and directs the determination of the Task Analysis Procedures, the human operations required for carrying out the task analysis.

Figure 1 (pp I.8 - I.9), the Task Analysis Design, models the actions taken in the design of the system and how the various components function with respect to one another. This figure serves as an organizational scheme for the topics discussed in this section.

TASK ANALYSIS DESIGN

DESIGN PARAMETERS

(REQUIREMENTS)

TRAINING SYSTEM CONGRUENCE

- compatibility with DLIFLC school model
- compatibility with generic TRADOC school model
- consistency with principles reflected in the IPISD
- establishment of job tasks as the basic unit of analysis

TASK ANALYSIS OUTPUT RECIPIENTS

- Administrators/Managers
- Course Developers
- Evaluators/Test Developers
- Other Task Analysts
- User Agency decision makers

ANALYSTS' SKILLS AND KNOWLEDGES

Required

- knowledge of task analysis principles and procedures
- interview and observation skills
- knowledge of TRADOC school model
- knowledge of IPISD operations and procedures

TASK ANALYSIS SYSTEM

(STAGES/FUNCTIONS)

PREPARATION STAGE

Identify MOS characteristics

- use or intended use of foreign language skills
- job requirements and setting

Identify data sources

- MOS job data location
  - persons
  - documents
- User Agency decision-making locations
  - persons
  - documents
- Expert opinion (outside the organization)
  - persons
  - documents

Review existing materials

- MOS job descriptions
- field and technical manuals
- other task analyses
- training materials

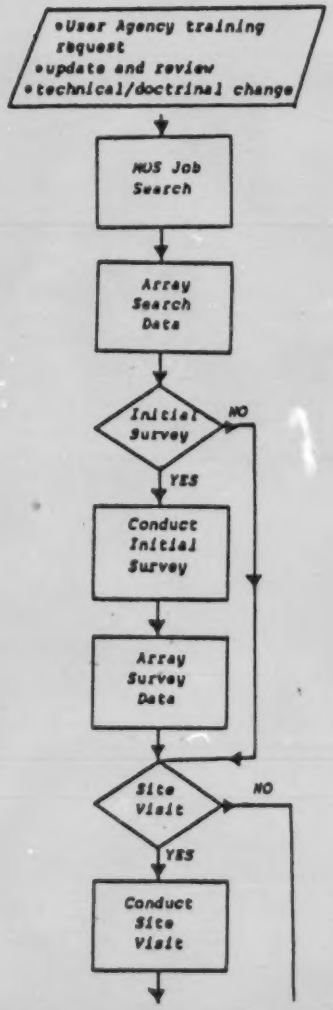
DATA COLLECTION STAGE

Select data-control plan

- define the problem for administrative decision makers
- present options

TASK ANALYSIS METHODOLOGY

(DATA CONTROL ALGORITHM)



Supplemental (not required)

- knowledge of the target language
- computer programming skills
- skill in linguistic analysis
- skill with inferential statistics
- prior target MOS knowledge

DATA TRACKING AND CONTROL

- focuses on output categories and data types within categories
- provides data-gathering algorithm (software component) that:
  - guides the analysts' procedures to insure necessity and sufficiency of data
  - provides decision points for selecting data tracks given a defined purpose or requirement, a specific time, specified resources, and User Agency constraints
  - lists procedures, the human operations, for each data-operation block in the Task Analysis algorithm
  - provides generalized interview, observation, and initial survey instruments (hardware component) for sorting input into appropriate output categories

OUTPUT CONTROL

- prespecified output: categories, data types, and formats are predetermined with respect to recipient needs
- format for communicative tasks, conditions, and performance indices is CONSTANT
- content for communicative tasks, conditions, and performance indices is VARIABLE
- priority tasks are determined with numeric data

- recommendation for data gathering
- determine time, resource, and User Agency constraints

Review instruments

- review instruments
- modify or change according to decisions resulting from the selected data-control plan

Collect data

- carry out strategies, i.e., initial survey, interview, observation
- array and analyze for sufficiency
- carry out follow-up as required

ANALYSIS STAGE

Analyze data

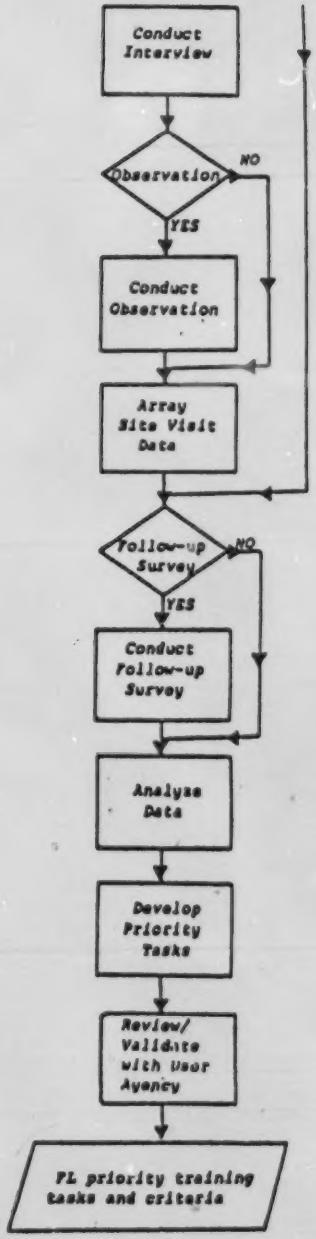
- analyze data according to prespecified output
- determine priority tasks, conditions, and performance

Validate/Review with User Agency personnel

- submit to User Agency
- make changes or modifications as required

Determine Terminal Skill Objectives

- determine TSOs
- provide all documentation
- provide language functions and vocabulary needs for TSOs
- deliver to linguists/analysts/developers as required



DESIGN PARAMETERS AND REQUIREMENTS FOR THE TASK ANALYSIS SYSTEM

Training System Congruence

Prior to the development of the task analysis system, the requirements of the system were listed with respect to the larger systems needs and operations. The DLIFLC training was "modeled" with the emphasis on how the task analysis subsystem for determining foreign-language requirements and their criteria would interface with that system. Figure 2 (p. 11) shows the decision areas most directly impacted upon by this project in the DLIFLC model.

This project is responsible for the front-end analysis and resulting procedures. The procedures result in the priority training objectives (the Terminal Skill Objectives) and documentation for the development of the Enabling Objectives (the linguistic objectives) for job-functional foreign-language training. The task analysis output also provides input for decision makers on whether resident or non-resident training would be most effective and when.

The task analysis system must be compatible with the TRADOC school model; i.e., it must provide sufficient data in a format that meets the needs and requirements of the Directorate of Training Development, Directorate of Training, and Directorate of Evaluation. These concerns are reflected in Output Control (pp. I.15-I.19).

Consistency with the IPISD principles is a primary concern. Figure 3 (p. I.12), the ISD model, provides the training analysis framework within which the presently developed system operates. The job task is the level of analysis. All communicative skills required to successfully perform that job task are defined, categorized, and developed with respect to a job task orientation. This entire project is responsible for determining the procedures for analysis that correspond to the IPISD blocks of I.1 Analyze Job, I.2 Select Tasks and Functions, I.3 Construct Job Performance Measures, II.1 Develop Objectives, and II.4 Determine Structure and Sequence.

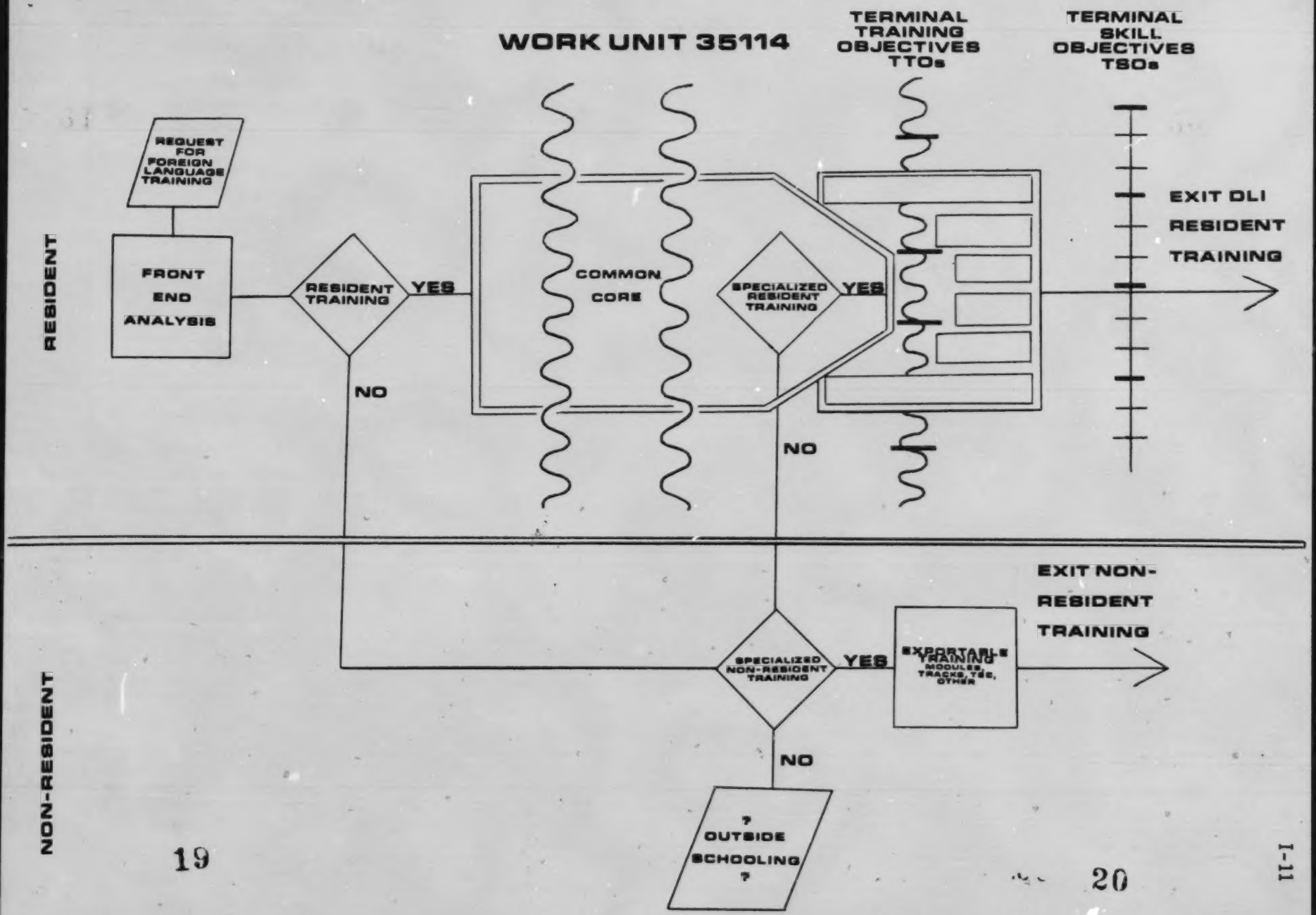
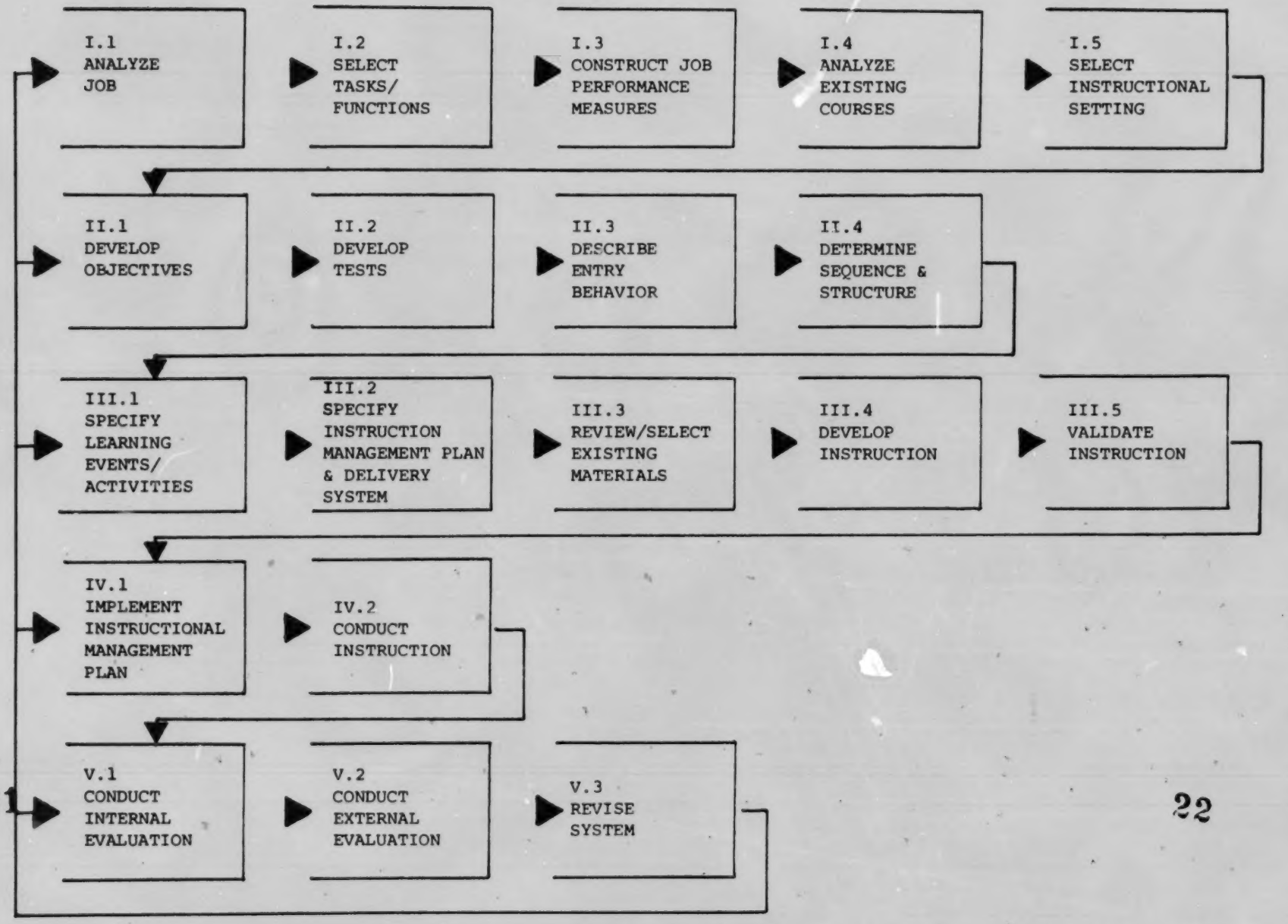

WORK UNIT 35114
TERMINAL TRAINING OBJECTIVES TTOs
TERMINAL SKILL OBJECTIVES TSOs
REQUEST FOR FOREIGN LANGUAGE TRAINING
FRONT END ANALYSIS
RESIDENT TRAINING
YES
NO
COMMON CORE
SPECIALIZED RESIDENT TRAINING
YES
NO
EXIT DLI RESIDENT TRAINING
EXIT NON-RESIDENT TRAINING
SPECIALIZED NON-RESIDENT TRAINING
YES
EXPORTABLE TRAINING MODULES, TRACKS, TDC, OTHER
NO
? OUTSIDE SCHOOLING ?
RESIDENT
NON-RESIDENT

Figure 3: IPISD Model


I.1 ANALYZE JOB
I.2 SELECT TASKS/ FUNCTIONS
I.3 CONSTRUCT JOB PERFORMANCE MEASURES
I.4 ANALYZE EXISTING COURSES
I.5 SELECT INSTRUCTIONAL SETTING
II.1 DEVELOP OBJECTIVES
II.2 DEVELOP TESTS
II.3 DESCRIBE ENTRY BEHAVIOR
II.4 DETERMINE SEQUENCE & STRUCTURE
III.1 SPECIFY LEARNING EVENTS/ ACTIVITIES
III.2 SPECIFY INSTRUCTION MANAGEMENT PLAN & DELIVERY SYSTEM
III.3 REVIEW/SELECT EXISTING MATERIALS
III.4 DEVELOP INSTRUCTION
III.5 VALIDATE INSTRUCTION
IV.1 IMPLEMENT INSTRUCTIONAL MANAGEMENT PLAN
IV.2 CONDUCT INSTRUCTION
V.1 CONDUCT INTERNAL EVALUATION
V.2 CONDUCT EXTERNAL EVALUATION
V.3 REVISE SYSTEM

Task Analysis Output Recipients

The design of the analysis system must insure that the output meets the data requirements of administrators, course developers, evaluators/test developers, User Agency decision makers, and other task analysts.

Administrators must have information on priority foreign-language tasks and optimal means for training User Agency personnel to perform those tasks. Providing overall curriculum guidance, establishing the broader course goals, and deciding upon resident or non-resident instruction are three areas of decision making in which the task analysis system must supply input.

Course developers must be furnished with both the descriptive data and documentation on a task-by-task basis and the collective (numeric or category) data that assist in the decisions for skill practice, emphasis on communication type, and resource development (new vocabulary, communicative scenarios, etc.).

Evaluators and test developers must be provided with sufficient "real-world" data arranged in a way that performance tests that are criterion-referenced can be constructed. Formative evaluation uses task analysis data to help keep the lesson development directed toward the actual communicative performance required of priority job tasks.

User Agency decision makers must be able to easily understand what the task analysis output says in terms of the communicative tasks, training conditions reflecting job-setting conditions that are relevant to the foreign-language learning and performance, and indices of adequate performance. Other task analysts must be able to inspect and "fine tune" output. Therefore, the needs of these recipients of task analysis data were a major factor in the design of the system.

Analysts' Skills and Knowledges

The skills and knowledges of the task analyst were also listed. Obviously, a task

analysis system can differ according to what one accepts as the minimal number of skills the analyst must have. That is, if the system can only be implemented by someone who has a thorough knowledge of the target language, is a competent computer programmer, and can function adequately in the MOS to be analyzed, then a number of good task analysts would fail in their efforts to conduct the analysis. Therefore, it was determined that the data-gathering components of the task analysis system must have a technique (a set of procedures) which required the analyst to have the following skills:

- knowledge of task analysis principles and procedures
- interview and observation skills
- knowledge of TRADOC school model
- knowledge of the IPISD operations and procedures

Additional skills would, of course, greatly assist the analyst in conducting task analysis for the foreign-language communicative requirement, but the model was designed to reduce the number of skills necessary. A possible lack of one or more of these skills is compensated for by: (a) a procedural guide to already established computer programs; (b) development of specific interview, survey, and observation instruments that minimize the need for knowledge of the target language; and (c) a means of determining the communicative tasks and language functions required to perform those tasks that are described in English. These language functions can then be transformed into the appropriate foreign-language utterances by linguists and language experts.

Data Tracking and Control

A critical design requirement is the tracking and control of input data as they move through the Task Analysis System. The data must be analyzed according to prespecified output requirements, and in both content and form, result in useful, complete, and accurate information. Data tracking and control is the responsi-

bility of the Task Analysis Methodology. The focus is on the output requirements and how data types fill in the prespecified output categories. The data control algorithm (pp. I.25-I.36) is the software component of the task analysis methodology. The data control algorithm provides decision points for selecting data tracks when the analyst is given a defined purpose or requirement, a specified time frame, specified resources, and User Agency constraints. The data control algorithm established guidelines for the development of the actual task analysis procedures, the human operations involved in conducting task analysis. These procedures are listed; they correspond with each data-operation block in the data control algorithm.

To complete the data tracking and control requirement of the Task Analysis System, generalized interview, observation, and survey instruments were developed. These instruments, functioning as the hardware component of the Task Analysis Methodology, were developed to move input data into output data with fidelity to the data control algorithm and the prespecified output categories.

Output Control

Output of the Task Analysis System is controlled by a careful prespecification of output. The prespecified output aggregates data in two forms: descriptive data, which includes all information necessary to construct individual communicative task statements, conditions statements, and language performance measures (language indices); and numeric data, which determines the priority tasks, priority topics, and high-frequency communicative tasks. That is, the descriptive data for each individual task is combined in the various output categories to assist course developers, test developers, and curriculum planners in making decisions by supplying instructionally relevant information.

The descriptive data defined individual communicative tasks, conditions, and stan-

dards. The format for a communicative task is constant. The content for a communicative task varies. The same is true for the conditions statement. Conditions statements also reflect the range of conditions found during task performance. During the job analysis, data for performance standards are collected through interviews, observations, and surveys. Verbal descriptions from MOS holders, vocabulary lists, documents, and job products (tapes or written materials) make up the bulk of the data. These sources are content analyzed by linguists and foreign-language test developers to determine the indices of adequate performance.

The format for a communicative task will always indicate five components: (1) the MOS/job together with the role (Appendix A) employed by the job holder: (2) the communicative activity; (3) a specific verb with a specific definition relating to training (Appendix B); (4) the primary audience characteristics; (5) the major topics used in this communicative task; and (f) a statement of the job task the communicative task supports, along with appropriate documentation. The conditions statement includes the environment, materials and equipment, reference sources, preparation time, linguistic register, and a summary description of the language content.

To supplement these tasks, scenarios are developed to more fully describe the required linguistic skills needed to accomplish the job task. An example of a communicative task statement, content, format, and categories for determining efficient and effective course development is shown in Figure 4 (pp. I.17-I.18). This breakdown of a communicative task allows all of the information to be divided into a series of categories so that overall training strategies can be based on the type of communicative skill required, the media employed, and the kind of performance testing (comprehension, comprehensibility, or both) used.

The numeric data indicates the critical tasks to be selected for training and the priority topics or subject matter. Priority communicative tasks are based on interview and survey data with respect to frequency of performance, mission criticality of the job task, criticality of the communicative task to the performance of the job task, and learning difficulty of the language used in the task. The priority topics are also determined by frequency of occurrence, criticality to the job task, importance to the communicative task, and learning difficulty. After the determination of critical tasks and topics, training decisions can be made with respect to output categories.

TASK STATEMENT DESIGN

COMMUNICATIVE TASK STATEMENT FORMAT

(*MOS holder*), as a (*role identification*), (*communicative activity*) for/with/to (*audience identification*)
1 2 3

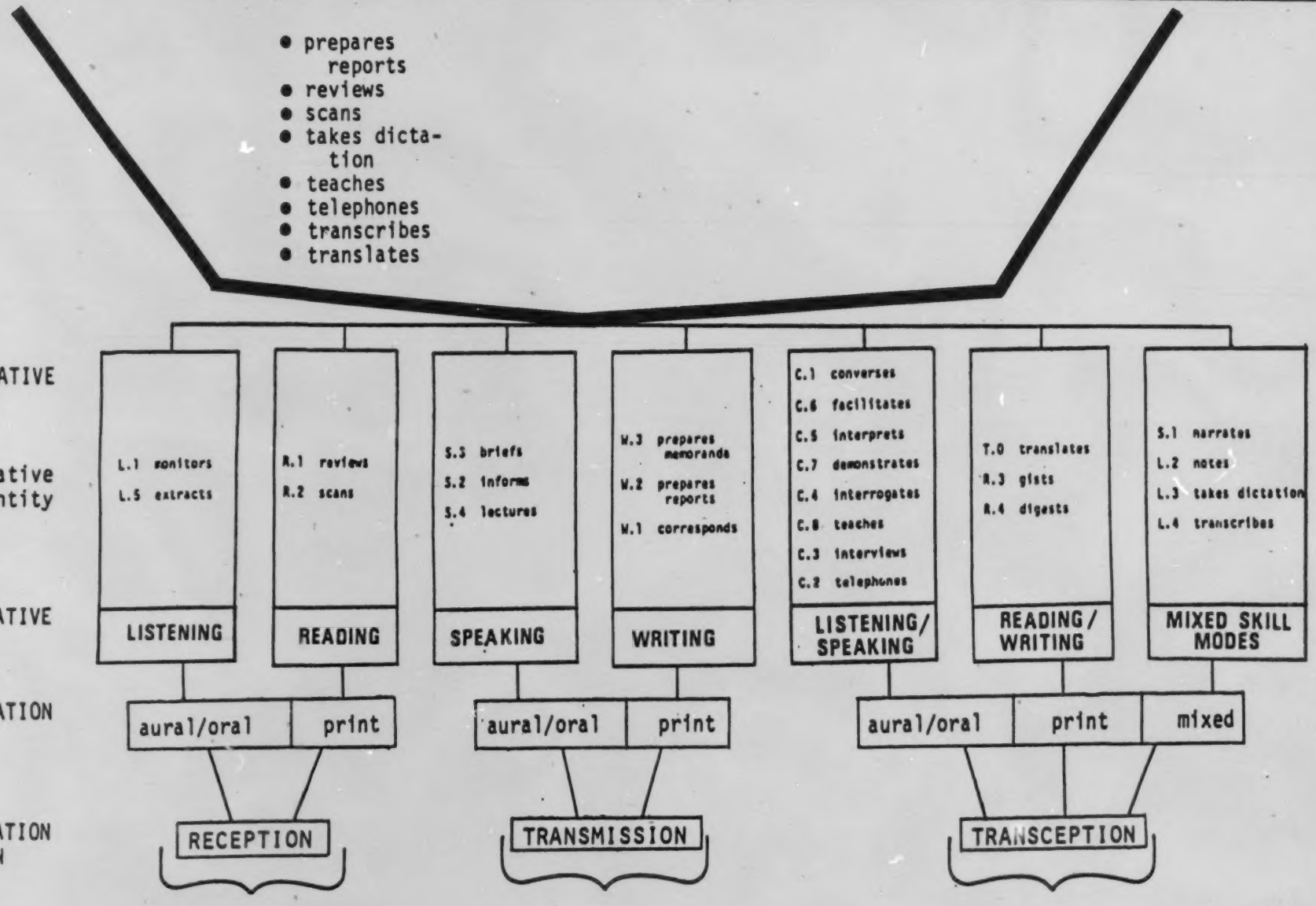
on (*topics listing*) for the purpose of (*job/task statement*).
4 5

EXAMPLE OF A COMMUNICATIVE TASK STATEMENT

The 91B MOS holder, as an instructor, demonstrates through the Russian language, to civilian personnel medical procedures for: (1) clearing air passages; (2) stopping bleeding; (3) treating for shock; and (4) protecting wounds, for the purpose of instructing trainees in basic medical skills. (Interview and survey data from 91B MOS holders.)

COMMUNICATIVE TASK STATEMENT COMPONENTS

MOS Holder 1	+	Communicative Activity 2	+	Audience Characteristics 3	+	Topics 4	+	Job/Task Statement 5
(Identification of the MOS, duty position, or job title, together with a role descriptor when applicable.) • commander • instructor • advisor • advocate • questor • aide		• briefs • converses • corresponds • demonstrates • facilitates • gists • informs • interprets • interrogates • interviews • lectures • monitors • narrates • notes • prepares memoranda		• individual • group • both • military • civilian • both Speaks: • TL only • TL & English • TL or English • English only (TL=target language)		List of topics that are critical to the mission, frequently used, and difficult to learn.		(Statement of the actual job/task(s) that the communicative activity supports and the job/task documentation source.) For example, • soldier's manual • job description • User Agency decision makers


• prepares reports
• reviews
• scans
• takes dictation
• teaches
• telephones
• transcribes
• translates
COMMUNICATIVE ACTIVITY VERBS (with communicative task identity number)
L.1 monitors
L.5 extracts
R.1 reviews
R.2 scans
S.3 briefs
S.2 informs
S.4 lectures
W.3 prepares memoranda
W.2 prepares reports
W.1 corresponds
C.1 converses
C.6 facilitates
C.5 interprets
C.7 demonstrates
C.4 interrogates
C.8 teaches
C.3 interviews
C.2 telephones
T.0 translates
R.3 gists
R.4 digests
S.1 narrates
L.2 notes
L.3 takes dictation
L.4 transcribes
REQUIRED COMMUNICATIVE SKILL
LISTENING
READING
SPEAKING
WRITING
LISTENING/ SPEAKING
READING/ WRITING
MIXED SKILL MODES
COMMUNICATION MEDIUM
aural/oral
print
aural/oral
print
aural/oral
print
mixed
COMMUNICATION DIRECTION
RECEPTION
TRANSMISSION
TRANSCEPTION
PERFORMANCE TESTING TYPE
COMPREHENSION
COMPREHENSIBILITY
COMPREHENSION/COMPREHENSIBILITY

I-19

TASK ANALYSIS SYSTEM

The Task Analysis System is divided into three stages: the Preparation Stage, the Data Collection Stage, and the Analysis Stage. The requirements for this system were covered in the previous subsection. The system itself is made up of function blocks within each of the stages, and the operations within each function block guide the selection of the most efficient "path" through the Data Control Algorithm when implementing the Task Analysis Methodology.

Preparation Stage

The preparation phase consists of: (a) identifying MOS characteristics; (b) identifying all possible data sources; and (c) reviewing existing materials. The characteristics that must be identified are the use or intended use of foreign language skills and the MOS job requirements and setting. After an initial list of the uses of foreign language and a list of job requirements has been made, the analyst approaches the problem of identifying data sources.

The prestatement of required output assists in identifying the primary data sources. The following data sources that provide input into the task analysis are:

Figure 5: Data Sources

Method of Acquiring Data	*User Agency decision makers	*MOS holders	Other Experts
	**personal contact	**personal contact	personal contact
	documents	documents	**documents

*indicate primary data sources for job task analysis
**indicate primary method of acquiring data

User Agency decision makers provide major input for critical tasks. MOS holders provide primary input on FL task frequency, learning difficulty, and FL criticality

for the task. Other data sources, such as DLIFLC Directorate of Training, experts in the field, native speakers, etc., also provide valuable information for the final analysis. These data are gathered by the systematic use of specific data-gathering instruments.

The review of existing materials is undertaken after the identification of data sources. Inspection of job descriptions, Field Manuals, Technical Manuals, MOS training materials, and discussions with other analysts and experts should result, whenever possible, in a tentative description of the various kinds of communicative tasks the MOS holder must perform. These operations are laid out within the operations block "MOS Job Search" of the Data Control Algorithm along with the procedures for conducting the Job Search.

Data Collection Stage

The Data Collection Stage is made up of three functions: (a) selection of the preliminary data control plan; (b) review and revision of instruments; and (c) collection of task analysis data from MOS holders and User Agency personnel. Because of the carefully defined and predetermined output requirements, this stage becomes extremely critical. The Analysis Stage is designed to be very straightforward. The quality of the task analysis, consequently, is primarily a function of the adequacy of the data gathering.

The selection of the data control plan is the result of the analyst's presentation of the task analysis problem as defined from the work in the Preparation Stage. The analyst must bring his case before higher authority in order to obtain the resources needed to conduct the data gathering and analysis.

Administrators and decision makers should be presented with a well-defined problem, a number of alternative solutions for data gathering, and the analyst's recommendations. With such information, the higher authority can make a better decision

on an appropriate data control plan given the alloted time, resources, and User Agency constraints.

Once the data control plan has been selected, the instruments (Volume II) should be reviewed and revised according to the findings from the Preparation Stage. These instruments will carry the main load for gathering and maintaining quality data throughout the entire analysis project.

The data is collected by implementing the strategies chosen--structured interview, observation, initial survey, or some combination. After the data gathering, the results should be analyzed for sufficiency. A follow-up survey should be conducted if the data is inadequate, i.e., if all the communicative tasks, conditions, and performance indices cannot be developed with existing information.

Analysis Stage

The three functions of the Analysis Stage are: (a) analyze the data according to prespecified output; (b) validate and review with User Agency personnel; and (c) determine the Terminal Skill Objectives required for training development.

The analysis must include the descriptive data that permits a full description of the communicative task, conditions, and performance indices and the priority communicative tasks and topics. These are developed complete with scenarios and key vocabulary and language functions lists. The tasks and all documentation are then presented to the User Agency for validation and review. After receiving User Agency comments, changes and modifications are made. The result should be the Terminal Skill Objectives with all documentation, language functions, vocabulary, and job products. The Terminal Skill Objectives are ready for the complete linguistic analysis and subsequent course development effort.

TASK ANALYSIS METHODOLOGY

From MOS-holder input to prespecified output, the collection of data must be tracked, monitored, and controlled to insure that, irrespective of how the input is received, the output is adequate and sufficient descriptive and numeric information for determining the foreign-language training objectives. This is the job of the Task Analysis Methodology. The Task Analysis Methodology has two components: the Data Control Algorithm and the Procedures used to carry out the algorithm.

The task analysis process begins with: (a) an initial request from a User Agency for job-functional foreign-language training, (b) a determination that existing training methods/materials are inadequate and in need of update, or (c) a technical or doctrine change impacting on the language requirement. The Data Control Algorithm responds to this input. The first operational block of the algorithm is the MOS Job Search. The task analysis team collects MOS-related documents, accesses results of prior task analysis efforts, and compiles a file of persons with job-related knowledge who may serve as information sources.

MOS Job Search data is collected and arrayed. These data would be insufficient for a "new" training request, but may be appropriate for a simple technical or doctrine change.

The first decision point is reached. The team must decide whether an initial survey is required. Again, time and resource constraints will be a factor.

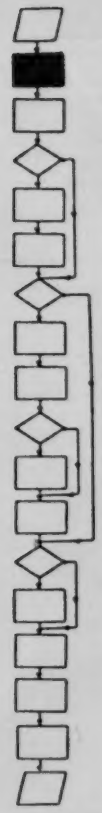
The second decision point in the Data Control Algorithm is whether or not a site visit is necessary. Time, resources, and User Agency constraints are weighed against better communications, flexibility afforded by site visits, and quality of data.

If the decision is made to go with a site visit, the next determination is whether or not to conduct observation. If observation of job performance is possible, a strategy for collecting observational data and arraying them in the appropriate task, conditions, and performance indices must be developed.

After an initial survey, site visit, or both, the data must be arrayed and tentatively analyzed to discover whether or not the information is sufficient. If it is not, then a follow-up survey should be developed and mailed out. This is the last decision point in the Data Control Algorithm. The final blocks in the algorithm are operational sections--analyze data, develop priority tasks, and review/validate with User Agency.

The "operational blocks" within the Data Control Algorithm are carried by the Procedures associated with each block. These procedures are the "human operations" required to identify, collect, analyze, and develop the Terminal Skill Objectives for the job-functional foreign-language skills. Each of the operational blocks and its procedures are outlined below.

MOS JOB SEARCH



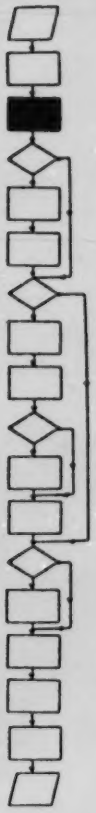
Procedures

- obtain MOS job descriptions from library or files
- obtain results of prior language requirement task analyses, if they exist
- secure field manuals related to MOS
- obtain training materials, handbooks, TEC lessons, workbooks, plans of instruction (POIs) used in training potential job holders
- check for the presence of in-house personnel with MOS job experience who may be able to serve as informal consultants

Comment:

"If the task analysis is initiated by a doctrinal change rather than a User Agency request, a less extensive documentation search will be necessary. You just have to check to see what part of the field manuals will be affected by the change, and how."

ARRAY JOB SEARCH DATA



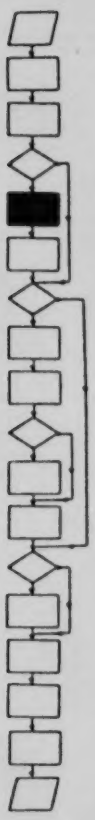
Procedures

- prepare summary of language-related job tasks for (each) MOS
- array sections of field manual affected by doctrinal change
- array sections of field manuals, technical and training materials which pertain to language requirement
- prepare list of local personnel available to serve as MOS consultants

Comment:

"We found that the very act of xeroxing the appropriate sections of the manuals, making the list of people, and in general just getting everything we knew about the MOS together in one place helped clarify our thinking about the job requirement."

CONDUCT INITIAL SURVEY



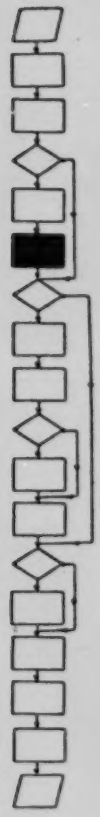
Procedures

- review survey instrument for up-to-dateness, appropriateness for specific setting and job
- contact persons in authority in User Agency to explain survey purpose and procedures
- determine POC within User Agency who will coordinate, expedite survey completion
- when determining which job holders should be designated to receive the survey instrument, choose in the following order: (1) an experienced job holder (at least one year experience) who uses target language (TL) on a daily basis in his/her present assignment; (2) an experienced job holder who does not presently use the TL, but who has used the TL on a daily basis in previous assignments; (3) an experienced job holder who uses a foreign language (FL) other than the TL in his/her present assignment; (4) an experienced job holder who has used a FL other than the TL on a daily basis in a previous assignment; (5) a job holder who uses the TL on a daily basis in his/her present assignment with less than one year of experience.
- mail out survey instrument with cover letter explaining purpose of survey. Letter should emphasize ways in which survey results will benefit job holder, e.g. better-prepared co-workers.
- mail out reminder letter to job holders who fail to return survey after prespecified period of time
- mail out thank-you letters to job holders

Comment:

"Many job holders will be convinced that the task analysis instrument is 'just another Army survey' that dumps information into a black hole with no visible results. If you can convince them that their input will make a difference in foreign-language training, they will give careful attention to the questions."

ARRAY SURVEY DATA



Procedures

- through the use of a computer program, perform the following steps:

  (1) for each item, group the numerical ratings or rankings of all survey respondents

  (2) calculate means for the responses to each item

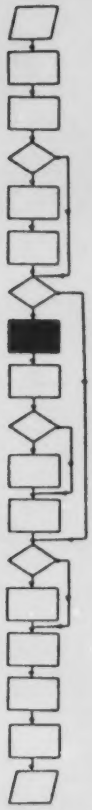
- you will receive printouts which display means for every scale related to each task, topic, or culture area. To calculate a numerical score for a task or topic (which is rated on four discrete scales), average the means for all scales related to that task or topic.

Comments:

"If the survey is small or the computer facilities are not available, you can do the job fairly easily by hand."

"Through discussion with User Agency decision makers or input from sources other than job holders, you may wish to weight different categories, such as frequency or criticality, for either communicative tasks or topics. The simple way is to move each response in the 'most important' category up one step. For example, a response of 2 would become a 1; a response of 3 would become 2; etc."

CONDUCT SITE VISIT



Procedures

- obtain permission for visit through chain of command at the selected site
- establish point of contact (POC) who will help to identify job holders, coordinate interview schedules
- coordinate visit time with local schedules. Avoid holiday periods. Check to make sure that maximum number of job holders will be at the site and not otherwise assigned at the time you have arranged.
- send copy of interview and observation instruments to site authorities for inspection before site visit
- given a choice of available job holders to be interviewed and/or observed, choose in the following order: (1) an experienced job holder (at least one year experience) who uses the target language (TL) on a daily basis in his/her present assignments; (2) an experienced job holder who does not presently use the TL, but who has used the TL on a daily basis in previous assignments; (3) an experienced job holder who uses a foreign language (FL) other than the TL in his/her present assignment; (4) an experienced job holder who has used a FL other than the TL on a daily basis in a previous assignment; (5) a job holder who uses the TL on a daily basis in his/her present assignment with less than one year of experience

Comments:

"Be sure to allow enough time for your visit to be approved and arranged by all the appropriate authorities."

"If possible, make a pre-data-collection site visit to become known and for the mission to be clearly understood."

"The first day, perhaps two days, of a site visit will be consumed by protocol. The last day may be used for briefing higher authorities on the accomplishments of the site visit. Plan on 'losing' two to three days during site visits."

CONDUCT INTERVIEW

Procedures

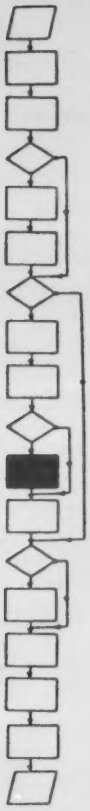
- review interview instrument
- arrange for quiet interview location separated from normal activities
- when acceptable, tape record interviews (with job-holder permission) to confirm accuracy of note-taking
- use interview instrument as a guide to the interview format, but ask additional follow-up questions that will get at the information you need, if necessary
- record notes and observations on interview instrument sheets for later reference
- assure job holders that you are assessing the FL requirement of their jobs, rather than evaluating their job performance
- interview support personnel such as secretaries in addition to job holders whenever possible (especially important in OCONUS sites where support personnel may have viewpoint/perspective of longer term assignment than job holders)
- collect documentation from job holders and support personnel while at job site
- obtain copies/photocopies of
  - correspondence in target language
  - manuals, books, charts containing target language vocabulary
- obtain names and mailing addresses for each interviewee; send a personal thank-you letter to each job holder

Comments:

"Be prepared for the job holders to see the interview as a 'gripe session,' and use the gripes constructively. Build some informal discussion time into your interview schedule. (It can precede the structured interview if the job holders are eager to comment, or follow it if they need some 'pump priming' to begin thinking about language needs.) Listen carefully to complaints about prior language training. Tales about important things that were neglected in past courses can give you clues about present job-related needs."

"Secondly, be prepared to take charge of the conversation and move it toward the interview questions after you feel that you've gotten as much useful information as you're going to get from the less structured discussion."

CONDUCT OBSERVATION



Procedures

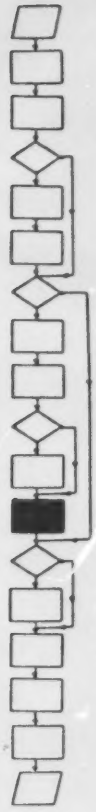
- either actual job performance or simulated job performance can be observed. If the job is to be simulated, the provision of small 'props' (e.g. bandages for a medic) by the job holder or the task analysis team can make the situation seem closer to 'real life.'
- assure job holders that you are assessing the FL required to do their job, rather than evaluating their job performance
- if observing actual job performance, try to be as unobtrusive as possible. Stay out of traffic areas. Try to position yourself in a corner and let the job holder go about his/her work as normally as possible.
- with job-holder permission, tape record all observations concurrently with note-taking and use of observation instrument

Comments:

"In spite of your assurances, many job holders will think that you are 'spying' on their performance. It can help them to loosen up and act more naturally if you stop part way through the observation period and 'validate' the observation by talking with them about some of the kinds of things you've observed."

"Tape recording individuals is extremely sensitive. Move slowly when seeking permission to tape record. We found it helpful to assure the MOS holders that at the end of the sessions they could listen to the tapes and erase portions or all of the tapes if they wished. It was up to them. Nobody ever bothered to listen to the replay, since a feeling of trust had been established."

ARRAY SITE-VISIT DATA



Procedures

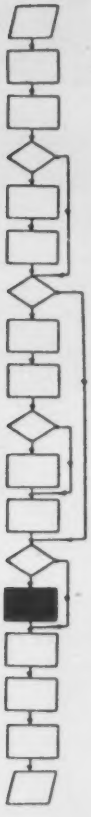
- go through the interview forms and, for each item, group the numerical ratings or verbal responses from all interviewed MOS job holders
- for every item in which the response is a numerical rating, calculate the mean of all the responses to that item
- for free verbal response items, indicate where identical or similar responses were given by the interviewees

Comments:

"It may prove helpful if the interviewer performs the first grouping of responses to free verbal response items. Notes taken during interviews are often hurried--and cryptic. They are difficult for a third party to interpret. Later, someone else can compile item data across interviewers."

"We found it helpful, even though we were tired, to debrief ourselves and put the data into a logical order at the end of the day."

FOLLOW-UP SURVEY



Procedures

- use follow-up questions to:

  (1) confirm questionable results of interview or observation

  (2) conduct more detailed exploration of area covered in earlier data-gathering efforts

  (3) query respondents on important subject areas omitted in earlier data gathering

- construct follow-up survey instrument based on results of site visit and/or initial survey

- keep follow-up instrument as short as possible

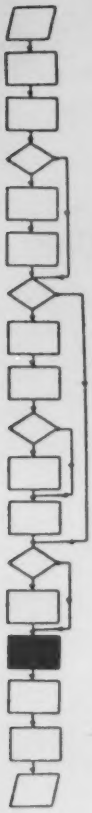
- send follow-up survey to both job holders contacted in earlier stages and to those missed in earlier efforts

Comments:

"Try to make sure that your POC for the follow-up survey is someone who's committed to the importance of the work you're doing. It's easy for follow ups to be so anticlimactic that they get lost in the shuffle of pressing daily needs. You need someone interested enough to push people to fill them out and get them back to you quickly."

"There are many User Agency decision makers who will go all out to help you accomplish the mission. Continue communication with each one. Reassignment happens all the time. The more active contacts you can maintain with the User Agency, the better. They are gold."

ANALYZE DATA



Procedures

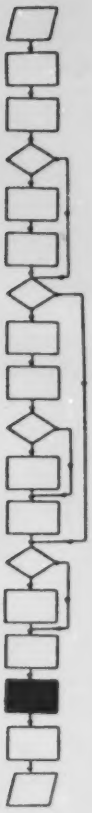
- develop three rank order lists--for tasks, topics, and culture areas--based on the mean ratings calculated from site-visit and/or survey data
- for survey data, compare the rank order lists based on ratings to the mean of rankings given to both tasks and topics by MOS job holders
- based on these rankings derived from both survey and site-visit data, determine priorities for further task analysis and/or instructional design

Comments:

"Our interview (site visit) data was based on a lower number of responses than the survey data. I found it helpful to compare the results of ranking procedures based on numerical ratings and rankings with responses to open-ended, non-structured items. It was reassuring to find that the rankings corresponded well to verbal responses."

"Be careful when analyzing an MOS job/duty position. You are after the FL communicative requirement for each job task, not the job tasks themselves."

DEVELOP PRIORITY TASKS



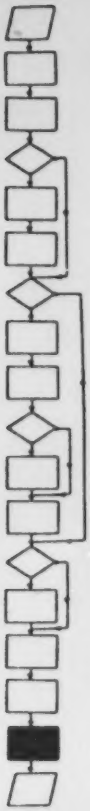
Procedures

- array list of possible communicative roles, activities, audiences, etc.
- construct Communicative Task Statements according to the algorithm provided. Choose one item from each category and concatenate them according to the established format
- construct conditions statement for each communicative task according to established format
- develop performance indices: key vocabulary listing, critical language functions, pronunciation rating for each communicative task

Comment:

"At this point, before you send the materials you've developed to the User Agency, you may want to change the wording of the Communicative Task Statements with respect to the communicative activity or the role designator if there's a chance that the original wording may not be easily interpretable by User Agency personnel. For example, the technical role INSTRUCTOR has a specific definition within the context of this classification system. Someone who wasn't familiar with that definition might read the word 'instructor' and think of a platform lecturer. If the User Agency personnel happen to think of themselves as 'demonstrators' or 'advisors' but engage in activities that fit the technical definition of 'instructor,' then modify the task statement so it will be intelligible to them--call them advisors or demonstrators or whatever."

REVIEW/VALIDATE WITH USER AGENCY



Procedures

- send draft versions of Priority Tasks to User Agency personnel for review and logical validation. Request feedback on how well the draft materials match job holder perceptions; ask for corrections and suggestions.
- make sure that the draft materials include Communicative Task Statements, conditions statements, and the descriptive indices (critical language functions, vocabulary listings, ratings of pronunciation adequacy) used to set performance standards.

Comment:

"Try to make sure that your draft versions get to some of the job holders you actually had contact with for feedback, rather than just to the officers in charge. You'll get the most valuable and accurate feedback from interested, concerned job holders themselves."

SECTION IV: TASK 3.0

Task 3.0 Determine the procedures for and develop the Terminal Skill Objectives.

Terminal Skill Objectives (TSOs) are directly derived from the Job Task Worksheets -- the output of the Task Analysis System. Although TSOs resemble Job Task Worksheets, there are significant differences:

JOB TASK WORKSHEETS	TERMINAL SKILL OBJECTIVES
•emphasis on job conduct	•emphasis on training
•states job standards	•develops Language Performance Measures (LPM Indices)
•states job conditions during task performance	•describes training conditions for training task performance

This shift of emphasis, requirement, and purpose from job to training is handled by the TSO Conversion Routine. The purpose of the TSO Conversion Routine is to ensure that: (1) job task data are accurately converted to training data: (2) Language Performance Measures (LPMs) are defined in terms of indices needed by CRT developers; and (3) the initial training standards and conditions have adequate descriptive guidelines to focus the training development process.

TSOs are always tentative. New job data, CRT results, User Agency requests, doctrine changes, and new or modified training capabilities will result in TSO modification. Consequently, the TSO Conversion Routine is indispensable in reflecting current training decisions. This routine, its methodology, and procedures are described in the following pages of this section. Figure 6 (p. I.39) Terminal Skill Objectives Design, describes the model.

One final word. The primary reason the output of the Task Analysis System is priority Job Task Worksheets and not TSOs is that TSOs are the result of training-oriented, not job-oriented, decisions. The data are the same, the foci are not. TSOs tell what the proponent school can do for you.

This is where the analyst puts up or shuts up. All of the systems talk, experience, notebooks full of "valuable" information, expert opinions, statistical analyses, time constraints, theory, excuses, and research mean nothing. The TSO is the bottom line. If the TSO is useless, the analyst is worthless. By the way, that's what makes instructional systems development fun.

TRAINING TASK ANALYSIS DESIGN

DESIGN PARAMETERS (Requirements) | TSO CONVERSION ROUTINE (Single Stage) | TSO METHODOLOGY (Data Control Algorithm)

The same requirements exist for the Training Task Analysis Design as for the Job Task Analysis. Emphasis is on:

- training system congruence
- output recipients
- analysts' skills & knowledges
- data tracking & control
- prespecified output
- prespecified formats

CONVERSION STAGE

Transform job to training task

Training task statement

Training task components

-role
-communicative activity
-audience
-topics
-purpose
-documentation

Analyze for performance

Language Performance Measures

-vocabulary indices
-functions indices

MacroStandards

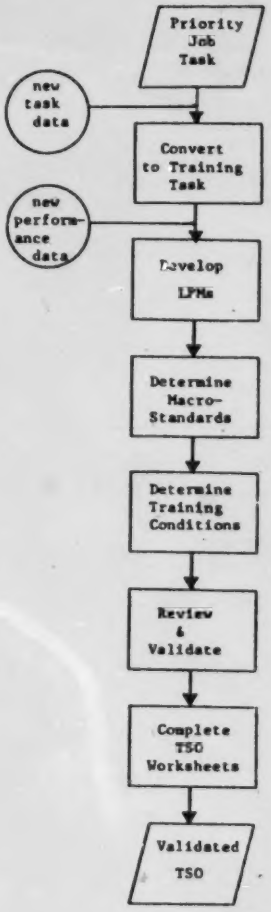
-performance description
-functions catagories
-vocabulary type

Determine training conditions

Preparation time & materials

Performance time & materials

Linguistic register



TSO CONVERSION ROUTINE

Design

The design parameters and requirements are essentially the same for the TSO Conversion Routine as for the Task Analysis System discussed in the previous section. The key features are the predetermined output format and category scheme. Analysts need not have an extensive background in the target language. However, the development of critical vocabulary requires native speakers and Subject Matter Experts (SMEs).

Conversion Stage

The TSO Conversion Routine is a single stage system with three major functions: (1) transforming job tasks to training tasks; (2) analyzing for adequate communicative performance; and (3) determining training conditions. All of the data transformations, analytic results, and determinations are put in the appropriate sections of the TSO Worksheets.

Transform job task to training tasks

Using the Job Task Worksheets as guides, the communicative task statements for TSOs can be constructed. The components of the communicative task statement are basically the same as the Job Task: role, communicative activity, audience, topics, and purpose. Documentation, the sources and verification of the communicative task, is also placed on the first page of the TSO.

Analyze for performance

The analysis determines the language performance parameters--the vocabulary and functions indices. Many different indices could have been selected for Language Performance Measures (LPMs). From a viewpoint of job-oriented training in languages, key technical or specialized vocabulary and the language functions

form the nucleus of required CRT measurement. Specialized vocabulary is not easily obtained in basic courses for it has a technical or situationally specific context. As such, the major portion of job communication relies on this specialized vocabulary. The language functions form the grammatico-syntactic patterns or structures necessary to convey common as well as specilized vocabulary in its proper context. The utility of these indices is more readily apparent in the development of the Enabling Objectives (Section V: Task 4.0, pp. I.61-I.99)

MacroStandards provide a descriptive statement of a situational training performance test. It also indicates the most important functional categories to be mastered, and the type of specialized vocabulary.

The language categories and functions used in the project are:

1.0 SEEK AND IMPART FACTUAL INFORMATION

- 1.1 identify objects, persons, processes
- 1.2 state factual information
- 1.3 seek factual information

2.0 REPORT, EXPPESS OR INQUIRE ABOUT INTELLECTUAL ATTITUDES

- 2.1.1 agreement
- 2.1.2 disagreement
- 2.2.1 an offer
- 2.2.2 declining an offer
- 2.2.3 accepting an offer
- 2.3.1 remembering
- 2.3.2 forgetting
- 2.4.1 possibility
- 2.4.2 impossibility
- 2.5.1 capability
- 2.5.2 incapability
- 2.6 need
- 2.7.1 certainty
- 2.7.2 uncertainty
- 2.8 obligation
- 2.9.1 request for permission
- 2.9.2 granting of permission
- 2.9.3 denial of permission
- 2.10.1 denial
- 2.10.2 affirmation/confirmation
- 2.11 awareness

2.12.1 difficulty
2.12.2 ease
2.13 belief/opinion

3.0 REPORT, EXPRESS, OR INQUIRE ABOUT EMOTIONAL ATTITUDES

3.1.1 pleasure/liking
3.1.2 displeasure/dislike
3.2.1 satisfaction
3.2.2 dissatisfaction
3.3.1 fear
3.3.2 worry
3.4 hope
3.5 surprise
3.6 preference
3.7 intention
3.8 want
3.9.1 approval
3.9.2 disapproval
3.10.1 importance
3.10.2 unimportance/indifference
3.11 anticipation

4.0 REPORT, EXPRESS, OR INQUIRE ABOUT GETTING THINGS DONE (SUASION)

4.1 suggestions
4.2 requests
4.3 invitations
4.4 advice
4.5 warnings
4.6 directions/instructions/commands
4.7 corrections

5.0 ENGAGE IN SOCIAL RITUALS

5.1 greet
5.2 take leave
5.3 open conversation/engage in small talk with:
5.3.1 a friend
5.3.2 an acquaintance/peer
5.3.3 an acquaintance/superior
5.3.4 an acquaintance/subordinate
5.3.5 a stranger/peer
5.3.6 a stranger/superior
5.3.7 a stranger/subordinate
5.4 end conversation
5.5.1 introduce
5.5.2 respond to introductions
5.6 begin/end a meal
5.7 propose a toast
5.8 express sympathy/empathy
5.9 express congratulations
5.10 express gratitude

5.11 express regret
5.12 express apology
5.13 strike a bargain
5.14.1 give gifts
5.14.2 receive gifts
5.15 tell jokes
5.16 telephone behavior
5.16.1 answer
5.16.2 respond to answer
5.16.3 request to speak to someone or an extension
5.16.4 respond to such request
5.16.5 wrong number
5.16.6 long distance
5.16.7 hold
5.16.8 messages
5.16.9 end conversations
5.16.10 take leave
5.17 give warnings/safety instructions
5.18 be hospitable

6.0 MANAGE COMMUNICATION

6.1.1 interrupt
6.1.2 acknowledge interruption
6.2 sequence communication
6.3 refocus and/or adjust communication
6.4 control speed
6.5 control volume
6.6 request repetition or offer to repeat
6.7 comment on or inquire about intelligibility
6.8.1 change topic
6.8.2 consent to change topic
6.8.3 refuse to change topic
6.9 request questions and/or comments
6.10 request or offer translation/explanation/clarification

Determining training conditions

The training conditions are the analysts' best estimates of the preparation time, materials, and equipment needed by the student to prepare for the situational performance test. After preparation time, the analyst estimates the required performance time for demonstrating mastery of the TSO along with the support materials and equipment the student will use. An example of a TSO is found on the following pages. This is TSO 11B.SF/C.7.02/RU, which demonstrates the care and use of the M60 Machine gun.

TERMINAL SKILL OBJECTIVE

No. 11B.SF / C.7.02 / RU

DOCUMENTATION: Interview/Survey Data: DLI Work Unit 35114
Task Analysis, 10th SFG, Ft. Devens
IMA SC 746D Military Handguns and Rifles
Soldier's Manual 11B10; FM 23-67 Machinegun 7.62mm M60

COMMUNICATIVE TASK

COMPONENTS	
Role	Instructor
Com Act	Demonstrates
Audience	Group/Individual
Topics	Machineguns
Purpose	Training machinegunners

STATEMENT

The student in the role of "INSTRUCTOR" "DEMONSTRATES" to others in the Russian language in a face-to-face situation on a group or individual basis how to: (1) inspect, clean, and maintain the machinegun, (2) load, clear stoppages, and unload the machinegun, and (3) aim, fire, and hit the target for the purpose of training personnel in the use of the M60 and other machineguns.

CONDITIONS

PREPARATION TIME	PERFORMANCE TIME
3 hours	30 min.
Materials/Equipment: dictionary, technical terms, mock M60 or equivalent, & dummy ammo	Materials/Equipment: 1-5 persons acting as trainees, mock machinegun, and dummy ammo

REGISTER

Speech	Print
__ techno-jargon	__ technical
__ formal	__ literary
x colloquial	__ informal

MacroSTANDARDS

DESCRIPTION The student will give a brief 10-minute lesson on inspecting and cleaning the machinegun; a brief lesson on loading, unloading, and firing. The student will answer individual questions for 10 minutes for communicative competence based on T.03 and T.04.

LPM INDICES

Functions	Vocabulary
x 1.0 Fact Info	x military
x 2.0 Intell Att	x technical
__ 3.0 Emo Att	__ other __
x 4.0 Suasion	
__ 5.0 Soc Rit	
__ 6.0 Man Comm	See T.04

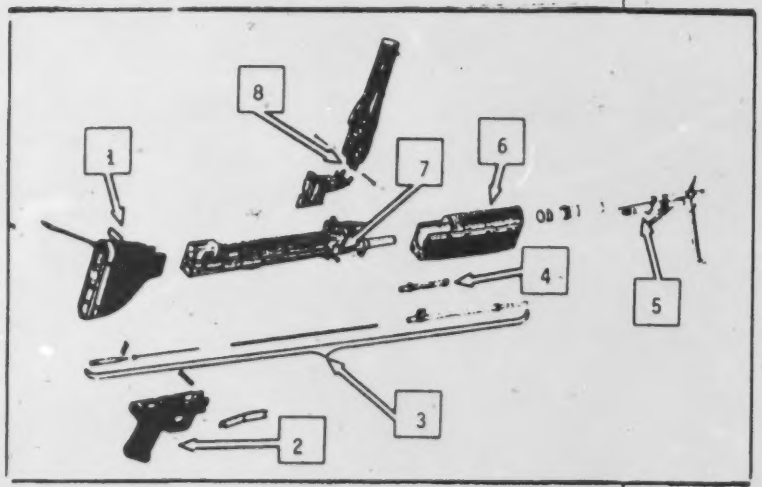
TSO No. 11B.SF / C.7.02/ RU

■ TSO

▱ EO

NA 1 2 3 4 5 6 7 8 9 10

TASK SCENARIO	KEY TERMS Vocabulary Items	FUNCTIONS Major Descriptors	COMMENTS Culture/References/Supplements
The student will discuss the major components of the M60 Machingun.		1.1 identify	The illustration comes from the Lesson Administration Instructions of TEC Lesson #941-071-0078-F



1. Stock
2. Trigger mechanism
3. Buffer and operating rod
4. Bolt
5. Barrel
6. Forearm
7. Receiver
8. Cover, tray, and hanger.

1. ложа
2. пусковой механизм
3. буфер и шток газового поршня
4. болт
5. ствол
6. целье
7. ствольная коробка
8. крышка, лоток, и серьга

The student must be able to explain technical terms or labels by providing simple definitions, giving examples and non-examples, and making comparisons.

TSO No. 11B.SF / C.7.02 / RU

NA 1 2 3 4 5 6 7 8 9 10

T.02

TSO

EO

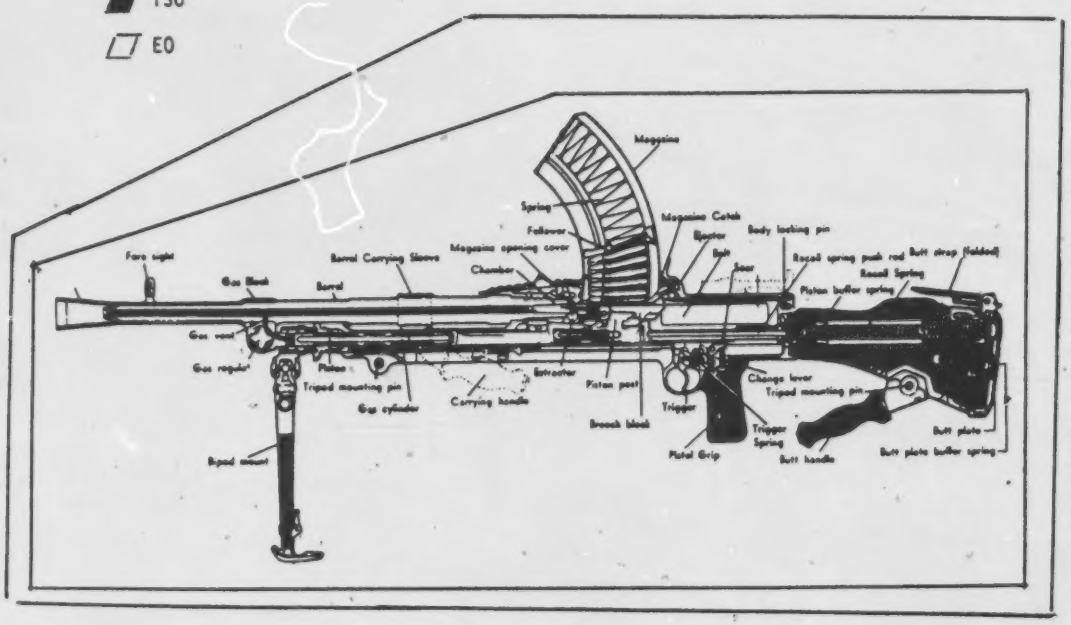


Illustration of a typical machinegun. From Miltary Handguns and Rifles, page 5-80, IMA SC 746D October 1974

1. Barrel-ствол
2. Barrel carrying sleeve - муфта рукоятки для переноски
3. Bipod mount- сошки
4. Body locking pin- чека ствольной коробки
5. Bolt - болт
6. Breech block- затвор
7. Butt handle - рукоятка приклада
8. Butt plate - затыльник
9. Butt plate buffer spring - амортизирующая пружина затыльника
10. Butt strap (folded)- откидная накладка плечевого упора
11. Carrying handle- рукоятка для переноски
12. Chamber- патронник
13. Charge lever- переводчик с автоматического огня на одиночный
14. Ejector- отражатель
15. Extractor-выбрасыватель
16. Follower- подаватель
17. Foresight- мушка
18. Gas block- газовая камора
19. Gas cylinder- газовый цилиндр
20. Gas regulator- газовый регулятор
21. Gas vent- газовое отверстие
22. Magazine- магазин
23. Magazine catch - защелка приемника
24. Magazine opening cover-крышка окна
25. Pistol grip - рукоятка пулемета
26. Piston - газовый поршень
27. Piston buffer spring- пружина амортизатора
28. Piston post- стойка штока поршня
29. Recoil spring- возвратно-боевая пружина
30. Recoil spring push rod- направляющий стре-
31. Sear- шептало жень
32. Spring- пружина
33. Trigger- спусковой крючок
34. Trigger spring - пружина спускового крючка
35. Tripod mounting pin- передний шворень крепления на треноги

Although these terms are not exhaustive, they represent the most useable group of labels for light weapons.

TSO No. 11B.SF / C.7.02 / RU

■ TSO

▱ EO

NA 1 2 3 4 5 6 7 8 9 10

TASK SCENARIO	KEY TERMS Vocabulary Items	FUNCTIONS Major Descriptors	COMMENTS Culture/References/Supplements
The M60 Machinegun The student will instruct others in the disassembly and cleaning of the M60 machinegun or some other machinegun.	пулемёт	5.1 greet 5.5.1 introduce 3.7 express intention 6.2 sequence communication 6.3 refocus/adjust communication	The student will gain attention, motivate, and state the learning objectives in simple language.
Disassembly	разбор пулемёта		
Remove the stock group.	ложа в сборе		The student will describe dissembly procedures, identify parts and label them, issue warnings and cautions about equipment, health, and safety.
Do not take it apart any further.			
Remove the buffer and operating rod.	буфер и шток газового поршня	1.1 identify 1.2 state factual information	
Remove the trigger group.	пусковой механизм в сборе	4.6 directions/ instructions/ commands	
Remove the receiver group.	ствольная коробка в сборе		
Cleaning	чистка пулемёта		
The machinegun must be clean at all times.			
When not in use, the machinegun must be inspected weekly.	осматривать каждую неделю пулемёт	1.1 identify 1.2 state factual information	The student will repeat the above procedure for cleaning.
It should be cleaned every 90 days.	девяносто дней		
The bore should be cleaned with compound solvent.	канал ствола растворитель		
Do not wipe dry.	вытирать		тряпка для чистки оружия = cleaning rag

TSO No. 11B.SF / C.7.02 / RU

■ TSO

▱ EO

NA 1 2 3 4 5 6 7 8 9 10

T.02

TASK SCENARIO	KEY TERMS Vocabulary Items	FUNCTIONS Major Descriptors	COMMENTS Culture/References/Supplements
On the third day after firing, clean the bore with rifle bore cleaner and wipe dry.	состав для чистки канала ствола		
Except for rubber parts, all other parts should be cleaned with cleaning solvent.	резиновая часть		
SPECIAL REMINDERS			
When firing at:			
100 rounds per minute, change the barrel every 10 minutes.	сто выстрелов на орудие в минуту	4.5 warnings 4.6 directions/ instructions/ commands	
200 rounds per minute, change the barrel every 2 minutes.	двести выстрелов на орудие в минуту		The student will model the procedures for loading the machinegun (See EO C.7-2/3)
550 rounds per minute, change the barrel every minute.	пятьсот пятьдесят выстрелов на орудие в минуту		
Loading the machinegun	зарядить		
Place the safety on FIRE.	переводчик на "огонь"	1.1 identify 1.2 state factual information	
Pull bolt to the rear.	болт, затвор		
Return cocking handle to the forward position.	рукоятка взвода	4.6 directions/ instructions/ commands	
Place safety on SAFE.	переводчик на предохранительном взводе	4.5 warnings	
Raise the cover and make sure the feedtray, receiver, and chamber are clear.	крышка лоток коробка патронник		

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TSO No. 11B.SF / C.7.02 / RU

■ TSO

☐ EO

NA 1 2 3 4 5 6 7 8 9 10

T.02

TASK SCENARIO	KEY TERMS Vocabulary Items	FUNCTIONS Major Descriptors	COMMENTS Culture/References/Supplements
Place the first round of the belt in the feed-tray groove. Close the cover, making sure the round stays in the feedtray groove.			
Unloading Pull the bolt to the rear. Place the safety on SAFE. Return the cocking handle to the forward position. Raise the cover and remove any ammunition from the feedtray.	разряжать пулемёт переводчик на предохранительном взводе рукоятка взвода крышка боеприпасы из лотка	1.1 identify 1.2 state factual information 4.6 directions/ instructions/ commands 4.5 warnings	The student will model and explain the steps in unloading. (See C.7-2/3)
Stoppage (Immediate Action) Pull cocking handle to the rear. Observe for ejected round. If nothing is ejected, keep handle to the rear and place weapon on SAFE. Open cover and remove ammo. Inspect chamber. Close cover. Move safety to FIRE and attempt to fire.	выброшенный патрон осмотреть патронник стрелять	1.1 identify 1.2 state factual information 4.6 directions/ instructions/ commands 4.5 warnings	The student will demonstrate the procedures of clearing stoppages.

T.02

TSO No. 11B.SF / C.7.02 / RU

NA 1 2 3 4 5 6 7 8 9 10

■ TSO

▱ EO

TASK SCENARIO	KEY TERMS Vocabulary Items	FUNCTIONS Major Descriptors	COMMENTS Culture/References/Supplements
The student will instruct others in engagement of targets with the machinegun. He will discuss and describe:			
Sight alignment	совмещение линии прицеливания с целью	1.1 identify 1.2 state factual information	The student will follow the steps in EO C.7-2/3 for each of the topics of engaging targets.
Sight picture	вид с точкой целивания	4.5 warnings 4.6 directions/ instructions/ commands	
Traversing	выполнение горизонтальной наводки		
Searching	прочёсывание в глубину		
Observation of Fire	наблюдение стрельбы		
Adjustment of Fire	корректирование огня		
			The student will follow EO C.7-4 and EO C.7-5 for Supervising Student Performance and Evaluating Student Performance.

LPM Functional Indices "DEMONSTRATES"

1.0 Factual Information	2.0 Intellectual Attitudes	3.0 Emotional Attitudes	4.0 Suasion	5.0 Elementary Social Rituals	6.0 Managing Communication
1.1 identify objects, persons, processes	2.3.1 remembering	3.1.1 pleasure/liking	4.1 suggestions	5.5.1 introduce (oneself)	6.1.1 interrupt
1.2 state factual information	2.3.2 forgetting	3.1.2 displeasure/ disliking	4.2 requests		6.2 sequence communication
	2.4.1 possibility		4.4 advice		6.3 refocus or adjust communication
	2.4.2 impossibility	3.2.1 satisfaction	4.5 warnings		
	2.5.1 capability	3.2.2 dissatisfaction	4.6 directions/ instructions/ commands		6.9 request questions and/or comments
	2.5.2 incapability	3.3.1 fear			
	2.6 need	3.3.2 worry	4.7 corrections		
	2.8 obligation	3.7 intention			
	2.11 awareness	3.9.1 approval			
	2.12.1 difficulty	3.9.2 disapproval			
	2.12.2 ease	3.10.1 importance			
	2.13 belief/opinion	3.10.2 unimportance			

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T.04

LPM Vocabulary Indices for TSO No. 11B.SF / C.7.02 / RU

Crit	English	Target Language: RUSSIAN
☒	adjustment of fire	корректирование огня
☒	ammunition	боеприпасы
☒	barrel	ствол
☒	bolt	болт, затвор
☒	bore	канал ствола
☒	buffer and operating rod	буфер и шток газового поршня
☒	chamber	патронник
☒	clean	чистить
☒	cleaning rag	тряпка для чистки оружия
☒	cocking handle	рукоятка взвода
☒	compound solvent	растворитель
☒	cover	крышка
☒	disassemble	разбирать
☒	ejected round	выброшенный патрон
☐	every week	каждую неделю
☒	fire (shoot)	стрелять
☒	forearm	целье
☐	hanger	серьга

Crit	English	Target Language: RUSSIAN
☒	inspect	осматривать
☒	inspect the chamber	осмотреть патронник
☒	load	заражать зарадить
☒	machinegun	пулемет
☒	ninety	девяносто
☒	observation of fire	наблюдение стрельбы
☒	on "safe"	на предохранительном взводе
☒	per minute	в минуту
☒	receiver	ствольная коробка
☒	rifle bore cleaner	состав для чистки канала
☐	rubber part	резиновая часть
☒	safety (selector)	переводчик
☒	searching	прочёсывание в глубину
☒	sight alignment	совмещение линии прицеливания с целью
☒	sight picture	вид с точкой целивания
☒	stock	ложа
☐	stock group	ложа в сборе
☒	traverse	выполнять горизонтальную наводку

LPM Vocabulary Indices for TSO No. 11B.SF / C.7.02 / RU

Crit	English	Target Language: RUSSIAN	Crit	English	Target Language:
☒	tray	лоток	☐		
☒	trigger mechanism	пусковой механизм	☐		
☒	unload	разряжать	☐		
☒	wipe	вытирать	☐		
☐	*****This list does NOT include those vocabulary		☐		
☐	items for machinegun parts on page T.02,		☐		
☐	page 2 of 6******* They are also part		☐		
☐	of the LPM Vocabulary Indices for this		☐		
☐	Terminal Skill Objective**********		☐		
☐			☐		
☐			☐		
☐			☐		
☐			☐		
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☐			☐		
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TSO METHODOLOGY

The TSO Methodology has two components; the Data Control Algorithm and the Procedures conducted under the guidance of the algorithm. The function of this methodology is to convert job data into training data. The emphasis is on the development of Vocabulary Indices and Language Function Indices for the LPMs.

Since any TSO represents the present state of training decisions, the algorithm is capable of responding to input of new task data or new performance data. Task data are technical changes in the task, doctrinal changes, and the like. Performance data are CRT results, vocabulary or functions changes due to technical or doctrinal changes, language changes due to Enabling Objective development and the like.

The "operational blocks" within the Data Control Algorithm are carried out through the Procedures associated with each block. These procedures are the "human operations" required to transform job data, develop LPMs, develop MacroStandards, and determine training conditions for each TSO. Each of the operational blocks and its procedures are outlined on the following pages.

CONVERT TO TRAINING TASK

Procedures

- construct communicative task statements (TSO Worksheets T.01).
- list task components: role (if applicable), communicative activity, audience, topics, and purpose.
- fill out documentation section reflecting the sources and verification of the TSO data.
- place the scenario from the Job Task Worksheets into the TSO (TSO Worksheets T.02).
- assign an appropriate alphanumeric designator to the TSO.

EXAMPLE:

11B.SF/C/8.04/RU

11B = MOS 11B Infantryman
SF = Special Forces
C.8 = Conversation (Listening/Speaking), the eighth communicative activity: "TEACHES"
04 = the fourth C.8 developed for the MOS 11B
RU = Russian language

Comment:

"Take the transformation of job to training seriously. As you begin to develop training tasks this difference becomes readily apparent."

DEVELOP LPM INDICES

Procedures

- review the vocabulary for technical accuracy, necessity, and sufficiency.
- place key vocabulary in the Vocabulary Indices (TSO Worksheet T.04).
- check vocabulary in the scenario to ascertain whether critical terms are noted and whether they are entered in the Vocabulary Indices.
- review the language functions for adequacy and sufficiency.
- list the key language functions by category 1.0 Factual Information, 2.0 Intellectual Attitudes, 3.0 Emotional Attitudes, 4.0 Suasion, 5.0 Social Rituals, and 6.0 Managing Communication.
- place the language functions in the Language Functions Indices (TSO Worksheet T.03).
- check language functions in the scenario to ascertain whether critical functions are noted and whether they are also entered in the Language Functions Indices.

Comments:

"Vocabulary and functions has been for us a constant, continual process. Every time you make a change in an Enabling Objective it screws up the TSO and vice versa. You should find that 'walking' the changes back and forth will eventually give you a pretty decent final product."

"If you go back to some of the Enabling Objectives developed for that communicative activity or an activity that closely resembles the one you are working on, you will save a good bit of time."

DETERMINE MacroSTANDARDS

Procedures

- get a small group together and lay out a situational performance that functions like a simulation of the communicative test in the TSO.
- write a brief description of the performance test.
- place the MacroStandards descriptive statement in the appropriate block on the TSO Worksheet (T.01).
- check the primary functions categories that are critical to mastery of the TSO.
- check the type of specialized vocabulary required for adequate performance for the MacroStandards.

Comments:

"Limit the group to three persons. Try to have an SME and a CRT developer. If the SME doesn't like the face validity of the test, chance are the User Agency MOS holders will think it stinks."

"CRT developers are quick to point out that simulated performance is not the only way to go with CRTs. That's a fact. However, when asking User Agency holders to assist in establishing a standard of performance, you will never get me to take them a multiple-choice, 50-item, machine-scoreable CRT. MOS holders can 'see' a performance test in their minds. This helps them determine an appropriate testing level. Later, a sharp test developer can do much when the level is clearly defined."

DETERMINE TRAINING CONDITIONS

Procedures

- get another small threesome together to make estimates of preparation time, performance time, and materials and equipment required by the student.
- review the TSO and the MacroStandards.
- reach decisions on time, material, and equipment estimates.
- place the estimated preparation time and performance time together with materials and equipment on the TSO Worksheet (T.01).
- check the appropriate register required for appropriate communication.

Comments:

"If you think this is trival, just wait. The first thing that happens is someone starts knocking the MacroStandard. Then a debate ensues. . . ."

REVIEW AND VALIDATE

Procedures

- contact the User Agency.
- solicit review and feedback on the TSOs.
- make all necessary changes and modifications.

Comments:

"Make an on-site visit if at all possible. We have tried it both ways. Make an on-site validation, if at all possible."

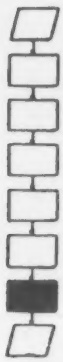
"MOS holders, particularly senior NCOs are smart. They also expect you to be something of a twit. When you have them review a good TSO, they will be surprised at what you have accomplished. Then they really start to give you truly important information."

"A good TSO does not mean free from error. It means a document that someone can correct."

"MOS holders come from a specialized content orientation, rather than a communication orientation. The best feedback will be concerned with doctrine or technical specifications. The comments section of TSO Worksheets is ideal for incorporating this information into the TSO."

"Be careful of changes in technical vocabulary, particularly with respect to deletions. A lost technical word is very hard to get back. The better strategy is to keep it in the Vocabulary Indices, but not mark it as critical. Remember TSOs represent the present state of training decisions."

COMPLETE TSO WORKSHEETS



Procedures

- check TSO Worksheet (T.01) to see that task statement, components, training conditions, and MacroStandards is complete.
- review scenario (T.02) for content, key terms and vocabulary, and language functions.
- review the Language Functions Indices (T.03) for completeness and congruence with the scenario.
- review the Vocabulary Indices (T.04) for completeness, accuracy, and congruence with the scenario.
- fill in any additional comments, notes to developers, alternate terms, or any clarifying information in the comments section of the TSO Worksheets (T.02).

Comments:

"You will always find errors, omissions, and inconsistencies."

"The comment section on the TSO Worksheets is really handy, particularly when you want to reference or explain something that is taken care of in the Enabling Objectives."

TRAINING TASK LISTING

The work accomplished using the TSO Conversion Routine, its methodology, and procedures was the development of all TSOs for priority tasks. The job/duty positions and their critical TSOs are as follows:

JOB/DUTY POSITION

Special Forces/Russian

11B Infantryman	11B.SF/C.7.01/RU	Demonstrates M16 rifle
11B Infantryman	11B.SF/C.7.02/RU	Demonstrates machinegun
11B Infantryman	11B.SF/C.8.01/RU	Teaches raid tactics
11B Infantryman	11B.SF/C.8.02/RU	Teaches patrolling
11B Infantryman	11B.SF/C.8.03/RU	Teaches patrol order
11B Infantryman	11B.SF/C.8.04/RU	Teaches ambush tactics
05B Radio Specialist	05B.SF/S.3.01/RU	Briefs on Com Sec
05B Radio Specialist	05B.SF/C.8.01/RU	Teaches Com Methods
05B Radio Specialist	05B.SF/C.8.02/RU	Teaches Com Nets
05B Radio Specialist	05B.SF/C.8.03/RU	Teaches Com factors
91B Medical Specialist	91B.SF/C.3.01/RU	Interviews for sick call
91B Medical Specialist	91B.SF/C.7.01/RU	Demonstrates bandages/splints
91B Medical Specialist	91B.SF/C.7.02/RU	Demonstrates fractures
91B Medical Specialist	91B.SF/C.7.03/RU	Demonstrates shock
91B Medical Specialist	91B.SF/C.7.04/RU	Demonstrates life-saving steps
91B Medical Specialist	91B.SF/C.7.05/RU	Demonstrates emergency airway

Special Forces/Chinese

11BF1 Ops/Intel Spec.	11BF1.SF/C.7.01/CM	Demonstrates map & compass
11BF1 Ops/Intel Spec.	11BF1.SF/C.8.01/CM	Teaches organization/plans
11BF1 Ops/Intel Spec.	11BF1.SF/C.8.02/CM	Teaches intelligence cycle
11BF1 Ops/Intel Spec.	11BF1.SF/C.8.03/CM	Teaches safeguarding information
11BF1 Ops/Intel Spec.	11BF1.SF/C.8.04/CM	Teaches collection of information
11BF1 Ops/Intel Spec.	11BF1.SF/C.8.05/CM	Teaches G Force
11BF1 Ops/Intel Spec.	11BF1.SF/C.8.06/CM	Teaches counterintelligence

Air Force/Spanish

MAAG Officer	MAAG/R.1.01/SP	Reviews letters/memoranda
MAAG Officer	MAAG/R.2.01/SP	Scans letters/memoranda
MAAG Officer	MAAG/C.1.01/SP	Converses on social topics
MAAG Officer	MAAG/C.1.02/SP	Converses on military topics
MAAG Officer	MAAG/C.2.01/SP	Telephones (military topics)
MAAG Officer	MAAG/C.6.01/SP	Facilitates communication
MAAG Officer	MAAG/C.3.01/SP	Briefs on military topics

Development and Validation

The TSOs were developed in draft form and mailed to the COTR at DLIFLC on 31 July 1978. The TSOs were under constant revision as the Enabling Objective System was being developed. Once the Enabling Objective System (Task 4.0) was established the TSOs were finalized in terms of form and content.

A final review and validation for Special Forces MOSs was conducted at FT Bragg, North Carolina in November 1978. Senior NCOs reviewed and validated the TSOs. All changes, corrections, and modifications were made. The review and validation of the TSOs for the MAAG Officers was done by mail and follow-up telephone calls to Madrid, Spain. Based on their feedback, all additions, changes, and modifications were made.

SECTION V: TASK 4.0

Task 4.0	Develop the procedures for and delineate the Enabling Objectives for the three languages and five job/duty positions.

The system for delineating Enabling Objectives (EOs) is based on the need to successfully interface language with communication. When the training requirement is job-functional foreign language performance, the analyst is hit with a simple powerful realization--language is not a synonym for communication. The foreign language requirement defines the prerequisite skills demanded of verbal or written communication. Communication itself, has skill requirements beyond those of language. These communicative skill prerequisites are delineated through an analysis of the communicative activities found in job tasks.

A communicative activity, viewed as the job holder's communicative task, is a subset of a higher-order job task. This subset consists of communicative elements indispensable to the successful performance of the job task because a communicative requirement exists within the job task and English simply cannot be the language used to support that task. A foreign language skill is needed to fulfill <u>part</u> of the communicative task, just as the communicative skill accomplishes <u>part</u> of the job task. Therefore the Enabling Objective System was developed through a language and Communications Analysis Design. Figure 7, (pp. I.64, I.65) lays out the design and resulting system and methodologies for determining the language-communicative objectives enabling the student to reach mastery of the TSOs.

LANGUAGE & COMMUNICATION ANALYSIS DESIGN

DESIGN PARAMETERS (REQUIREMENTS)

The design requirements are the same as those in the Task Analysis System and the TSO Conversion Routine.

Analysts' skills and knowledges must be supplemented with linguists and native speakers of the target language.

Data tracking and control is governed by the EO Methodology and its supporting procedures.

Output control is maintained by prespecified formats and content categories.

The EO System is based on the following language and communication assumptions:

ENABLING OBJECTIVE SYSTEM (STAGES/FUNCTIONS)

COMMUNICATIONS ANALYSIS STAGE

Research the communicative activity

- Identify sources of information
  - the required TSO
  - previously developed EOs
  - relevant library materials
- Collect resources and review

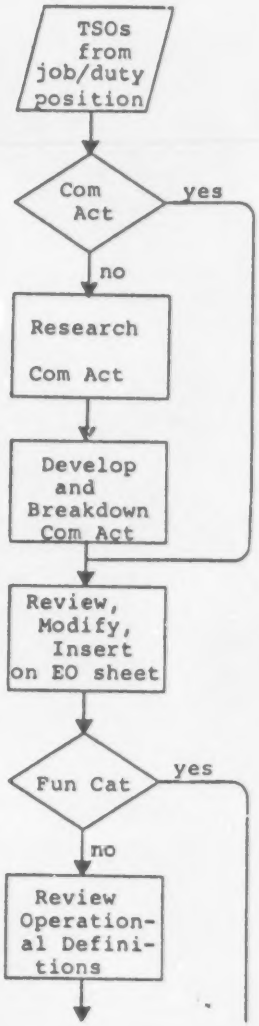
Develop/Breakdown the Com Act

- Determine a logical organization
- Develop a communicative strategy
- Partition the strategy into learning blocks
- Add relevant learning blocks that support the strategy, such as:
  - providing communicative guidance
  - question-answer routines
- Supply required language functions

Review for adequacy

- Try out communicative strategy
- Check for sufficient number of learning blocks
- Check for sufficient number and types of language functions for testing

EO METHODOLOGY (DATA CONTROL ALGORITHM)



- *EOs must marry language to communication.*
- *job-functional language can be organized in the form of a functional syllabus.*
- *a breakdown of communicative activities forms a strong basis for developing EOs than establishing levels of grammatical or syntactic complexity.*
- *one EO may adequately describe mastery progress toward more than one TSO.*
- *EOs based on communicative activities will be finite in number.*
- *a single communicative activity breakdown with the elements from the language functions catalog is, when given the specialized vocabulary, a sufficient learning path to any TSO requiring that communicative activity.*

LANGUAGE ANALYSIS STAGE

Review the operational definitions of the functions

- Check the functions list for comprehensiveness
- Review the operational definitions
- Research functions literature
- Modify, add, or delete functions as required

Develop functions catalog and rolebooks

- Establish functional categories
- Determine augmenting roles
- Generate elements for each category in the catalog and rolebooks

Review functions catalog and rolebooks

- Check functions catalog for adequacy
  - category necessity
  - element sufficiency
- Check role elements for cultural sensitivity

SYNTHESIS STAGE

Integrate the functional elements

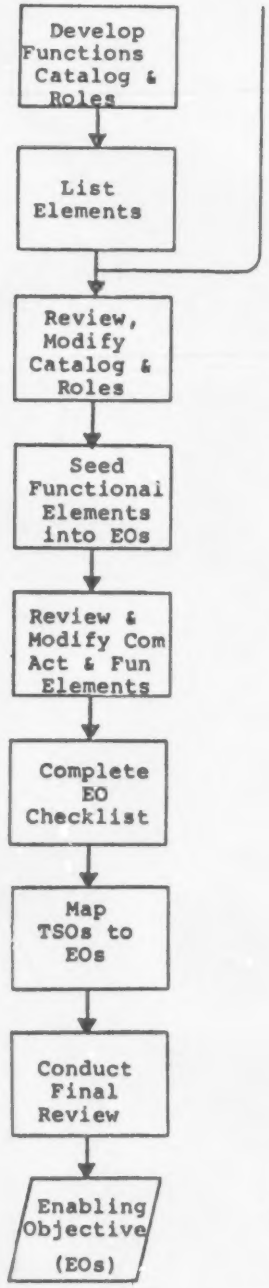
- Seed the functional elements into the functions in the EO set
- Review the complete communicative activity within the EO set
- Check the elements for sufficiency and integrity

Marry the TSO to the EO set

- Compile all TSO/EO support documents
- Map the TSO to the EOs through the TSO Map Worksheet

Conduct final review

- Convene expert review panal
- Modify as required
- Complete final draft


Develop Functions Catalog & Roles
List Elements
Review, Modify Catalog & Roles
Seed Functional Elements into EOs
Review & Modify Com Act & Fun Elements
Complete EO Checklist
Map TSOs to EOs
Conduct Final Review
Enabling Objective (EOs)

DESIGN PARAMETERS AND REQUIREMENTS FOR LANGUAGE AND COMMUNICATIONS ANALYSIS

Training System Congruence

As with the Task Analysis System, congruence with TRADOC guidelines, the DLIFLC school model, and the principles of Instructional Systems Development (ISD) was carefully monitored.

Enabling Objective Recipients

The recipients of Enabling Objectives are primarily CRT developers, course developers, and managers/administrators. The entire front-end package from task analysis to TSOs to EO sets with supporting materials must be sufficient for test construction and course development.

Analysts' Skills and Knowledges

The TSOs and EOs are essentially developed in-house. Consequently, a pool of language expertise is more readily available. However, this EO System permits much of the determination and delineation of EOs to be done by analysts with little language background. The acquisition of technical, specialized vocabulary does require some knowledge of the target language. The development of functional elements in the Functions Catalog and Rolebooks demands native speaker competency.

Data Tracking and Control

The design requirements for adequate tracking and control of data is as critical for the EO System as for the Task Analysis System. Again, this control is maintained by a data control algorithm and the human operations or procedures governed by it.

Output Control

The output of the EO System is controlled by prespecification of format and content categories. The EO Worksheets, the Functions Catalogs, and the TSO Map

all serve to keep the analyst focused on the ultimate requirement--a learning path to mastery of the TSO.

Language and Communicative Assumptions

The EO System was developed through adherence to the following assumptions about the role of EOs in delineating language and communication training requirements:

- EOs must integrate language with communication.
- job-oriented language can be organized in the form of a functional syllabus.
- a breakdown (partitioning) of communicative activities forms a stronger basis for developing EOs than establishing levels of grammatical or syntactic complexity.
- one EO may adequately describe mastery progress toward more than one TSO.
- EOs based on communicative activities will be finite in number.
- a single communicative activity breakdown with the elements from the language functions catalog is a sufficient learning path to any TSO requiring that communicative activity, if the specialized vocabulary is provided.

ENABLING OBJECTIVE SYSTEM

The Enabling Objective System is divided into three stages: the Communications Analysis Stage, the Language Analysis Stage, and the Synthesis Stage. The design parameters and requirements were discussed in the previous subsection. This system also consists of function blocks within each stage. The operations within the function blocks are the imperatives for calling up the Data Control Algorithm. The algorithm, in turn, governs the procedures used when implementing the EO Methodology.

Communications Analysis Stage

Communications Analysis is the process of breaking down in a systematic fashion the underlying communicative strategy of a communicative activity into a finite number of communicative events. These events serve as categories for seeding

language functions necessary for accomplishing the communicative event. The actual analysis is neither unduly complex nor excessively time-consuming. Strategy plans are already available in many forms for every communicative activity. The major requirement is systematic rigor.

At the highest level the student's language behavior can be thought of as exhibiting one or more of the communicative skills of listening, speaking, reading, or writing. During this project these skills have been expanded to include such interactions as listening/speaking, reading/writing, and the mixed modes of listening/writing and speaking/reading. For each communicative skill several communicative activities were identified. For example, the communicative skill of listening/speaking is demonstrated through the communicative activities of demonstrating, teaching, interviewing, conversing, telephoning, facilitating and so on. During the communicative activity of teaching, an instructor's effectiveness is largely determined by his plan of instruction (POI) and his communicative strategy for carrying it out. In order to learn the language to accomplish a job task, the student must also master the communicative strategy for implementing the language skill. The job holder can only use his language skills and knowledges to the degree that he knows how to use those skills and knowledges. Moreover, communicative activities, as strategic plans, can be broken down into learning blocks that provide a clear path to TSO mastery.

The logic of the communications analysis is based on the following assumptions and definitions: (1) communicative skills underlie communicative activities; (2) communicative activities are best accomplished through a sound communicative strategy; (3) a communicative strategy is a structured plan for conducting communicative operations; (4) communicative operations can be taught as learning blocks (enabling steps) or one or more communicative events; (5) communicative

events form categories in which language functions can be identified; (6) the language functions will exhibit one or more elements in the target language that exemplify the grammatico-structural requirements.

Figure 8 (pp. I.70, I.72) shows the communicative activity breakdowns of the primary listening/speaking skills found in the five job/duty positions analyzed during this project. The activity "briefs", is actually classified as a speaking, rather than listening/speaking, skill since briefings are normally prepared in advance, delivered to an audience, and questions may or may not be asked afterward. In this case, briefing was included in the listening/speaking skill category because the strategy calls for a communicative operation (a learning block) for comprehending and answering questions of different types.

COMMUNICATIVE SKILL:	Listening/Speaking
COMMUNICATIVE ACTIVITIES	(Briefs), Demonstrates, Teaches, Converses Telephones, Facilitates
COMMUNICATIVE STRATEGY:	The actual, real-world plan for carrying out the communicative task for the purpose of accomplishing the job task.
COMMUNICATIVE OPERATIONS:	The learning blocks of communicative events that form logical units or enabling steps for mastery of the strategy implicit in the communicative activity.
COMMUNICATIVE EVENTS:	Segments of a communicative operation or learning block for which language functions (if used) can be identified.

Language Functions:	The language functions provide elements that provide examples of the grammatico-structural patterns required for achieving the communicative event in the target language.

Language Analysis Stage

The language analysis is conducted using a functional approach. This approach parallels the functional-notional approach advocated by the Council of Europe

Breakdown of Communicative Activities

COMMUNICATIVE ACTIVITY

"BRIEFS"

STATING THE PROBLEM
(NEED OR REASON)
Gain attention
3.7/5.1/5.5.1/6.1.1/6.2/6.3
Clarify/State the problem
1.1/1.2/2.1.1/2.1.2/2.6/2.7.1/
2.7.2/2.11/3.10.1

INTRODUCING KEY TERMS
Define required terms
1.1/1.2/2.6
Provide special definitions
1.1/1.2

REPORTING FINDINGS AND/OR
BACKGROUND INFORMATION
Order events chronologically
1.1/1.2/6.2
Order events according to
significance
1.1/1.2/2.6/2.8/2.13/3.2.1/
3.10.1/3.10.2/6.2

LISTING ALTERNATIVE SOLUTIONS
Report optimal alternative
1.1/1.2/2.5.1/2.6/3.2.1/3.6/
3.9.1
Report other alternatives
1.1/1.2/2.5.1/2.5.2/3.2.1/3.2.2/
3.9.1/3.9.2

RECOMMENDING REQUIRED ACTIONS
4.1/4.4/4.5/4.7/2.4.1/2.4.2/
2.5.1/2.5.2/2.12.1/2.12.2/2.13/
3.2.1/3.2.2/3.11

PROVIDING COMMUNICATIVE
GUIDANCE
Encourage questions
6.9
Answer questions
1.1/1.2/2.4.1/2.4.2/2.5.1/
2.5.2/2.7.1/2.7.2/2.12.1/2.12.2/
2.13/3.5/3.9.1/3.10.1/3.10.2
Monitor presentation
6.4/6.5/6.7
Acknowledge emotional
attitudes
3.1.1/3.1.2/3.2/3.10.1/
3.10.2
Provide supportive correction;
recommend; caution
2.10.1/2.10.2/3.2.1/4.7/4.1/4.2/
4.4/4.5
Close
5.10

COMMUNICATIVE ACTIVITY

"TEACHES"

INTRODUCING THE SUBJECT
Gain attention
3.7/5.5.1/6.1.1/6.2/6.3
Motivate
2.6/2.8/3.1.1/3.4/3.10.1/4.1
State learning objectives
1.1/1.2
Provide overview of activities
and/or procedures
1.1/1.2/3.7
Explain evaluation
2.8/2.5.1/2.5.2/3.2.1/3.2.2

DEVELOPING THE SUBJECT
Identify/define main points
1.1/1.2/3.10.1
Explain/support main points
1.1/1.2/2.4.1/2.4.2/2.5.1/2.5.2/
2.6/2.8/3.10.1/4.1/4.5/4.6

CONCLUDING THE LESSON
Recall main points
1.1/1.2/2.3.1/2.3.2
Recommend courses of action
2.6/2.8/3.10.1/4.1/4.4/4.6/4.7

PROVIDE COMMUNICATIVE
GUIDANCE
Encourage questions
6.9
Answer questions
1.1/1.2/2.4.1/2.4.2/2.5.1/2.5.2/
2.10.2/2.12.1/2.12.2/2.13/3.1.1/
3.1.2/3.6/3.10.1/3.10.2/4.7
Acknowledge emotional
attitudes
3.1.1/3.1.2/3.2.1/3.2.2/3.3.1/
3.3.2/3.10.1/3.10.2
Provide supportive correction;
recommend; caution
3.2.1/4.1/4.2/4.5/4.7

COMMUNICATIVE ACTIVITY

"TELEPHONES"

GREETING/INTRODUCTION
5.16.1-8/5.1.1/5.1.2/5.5.1/
5.5.2

STATING THE PURPOSE
Obtain/Transfer Factual
Information
1.1/1.2/1.3/2.2.1/4.2/6.8
Evaluate Options
2.0 Intellectual Attitudes
(All functions)
Assess Human Reactions
3.0 Emotional Attitudes
(All functions)
Initiate Actions
2.4.1/2.4.2/2.5.1/2.5.2/2.6/4.2

ACTUALIZING THE PURPOSE
Develop Strategy
Initiate Communication
1.0 Factual Information
(All functions)
2.0 Intellectual Attitudes
(All functions)
3.0 Emotional Attitudes
(All functions)
4.0 Getting things done
(Suasion)
(All functions)
Communications Management
6.3/6.5/6.7/6.8.1

CONFIRMING THE RESULTS
Report facts
1.1/1.2/2.1.2/2.1.2/4.7
Report Thinking of the Other
Party
2.0 Intellectual Attitudes
(All functions)
4.7
Report Feelings of the Other
Party
3.0 Emotional Attitudes
(All functions)
2.1.1/2.1.2/4.7
Report Actions to be Taken
1.1/1.2/2.1.1/2.1.2/4.7

CLOSING
Inquire about Further Concerns
1.3/2.6/2.3.1/2.3.2/3.3.1/
3.3.2/3.8/3.10
Close
5.10/5.16.9/5.16.10

Requiring Speaking/ Listening Skills

COMMUNICATIVE ACTIVITY

"DEMONSTRATES"

INTRODUCING THE DEMONSTRATION
Gain attention
3.7/5.5.1/6.1.1/6.2/6.3
Motivate
2.6/2.8/3.10.1/4.1
State learning objectives
1.1/1.2
Provide overview of activities and/or procedures
1.1/1.2/3.7/6.2
Explain evaluation
2.5.1/2.5.2/2.8/3.10.1

PROVIDING EXPLANATION
Issue warnings and cautions
4.5/2.4.1
Identify parts and label them
1.1/1.2
Identify steps in a procedure
1.1/1.2/4.6/6.2

DEMONSTRATING
Make comments on modeled actions
2.3.1/2.3.2/2.4.1/2.4.2/2.6/3.10.1/4.5/4.6
Make comments on procedures
2.3.1/2.3.2/ 2.4.1/2.4.2/2.6
3.10.1/4.5/4.6

SUPERVISING STUDENT PERFORMANCE
Answer questions
1.1/1.2/4.6/4.4/4.7
Acknowledge emotional attitudes
3.1.1/3.1.2/3.3.1/3.3.2/3.10.1/3.10.2
Provide supportive correction
3.2.1/4.1/4.4/4.7

EVALUATING PERFORMANCE
Ask questions
1.3/2.5.1/2.11
Express approval/disapproval
3.9.1/3.9.2
Provide assessment
1.1/1.2/3.2.1/3.2.2/4.7

PROVIDING GUIDANCE
Encourage questions
6.9
Answer questions
1.1/1.2/2.4.1/2.4.2/2.5.1/2.5.2/2.12.1/2.12.2/2.13/3.10.1/3.10.2
Acknowledge emotional attitudes
3.1.1/3.1.2/3.3.1/3.3.2/3.10.1/3.10.2
Provide supportive correction; recommend; caution
3.2.1/4.1/4.2/4.5/4.7

COMMUNICATIVE ACTIVITY

"FACILITATES"

DETERMINING THE PURPOSE
Meet with Responsible Party (RP)
Brief RP on key factors
Recommend a communicative strategy

FACILITATING THE INTERCOMMUNICATION
Follow established protocol
Carry out special requests of the RP
Facilitate social interaction/ Monitor the effectiveness of communication
5.1/5.3/5.5.1/5.5.2/5.10/6.1.1/6.7/6.10
Report/Inquire as required
1.0 Factual Information
(All functions)
2.0 Intellectual Attitudes
(All functions)
3.0 Emotional Attitudes
(All functions)
4.0 Getting things done
(Suasion)
(All functions)

FOLLOWING-UP
Debrief with RP
Carry out immediate actions requested by the RP

COMMUNICATIVE ACTIVITY

"CONVERSES"*

GREETING/INTRODUCTION
5.1/5.3.1-7/5.5.1/5.5.2/5.8/5.10/5.11/5.12/6.1.6

STATING THE PURPOSE
Obtain/transfer factual information
1.1/1.2/1.3/2.2.1/4.2/6.8
Evaluate options
2.0 Intellectual Attitudes
(All functions)
Assess human reactions
3.0 Emotional Attitudes
(All functions)
Initiate actions
4.2/2.4.1/2.4.2/2.5.1/2.5.2/2.6

ACTUALIZING THE PURPOSE
Develop strategy
Initiate communication
1.0 Factual Information
(All functions)
2.0 Intellectual Attitudes
(All functions)
3.0 Emotional Attitudes
(All functions)
4.0 Getting things done
(Suason)
(All functions)
Control conversation flow
6.3/6.8.1/6.8.2/6.8.3

CONFIRMING THE RESULTS
Report facts
1.1/1.2/2.1.1/2.1.2/4.7
Report thinking of other party
2.0 Intellectual Attitudes
(All functions)
4.7
Report feelings of the other party
3.0 Emotional Attitudes
(All functions)
2.1.1/2.1.2/4.7
Report actions to be taken
1.1/1.1/2.1.1/2.1.2/4.7

CLOSING
Inquire about further concerns
1.3/2.6/2.3.1/2.3.2/3.3.1/3.3.2/3.8/3.10
Close
5.2/5.4/5.10

*"CONVERSES" is used here for job-purposeful conversing only.

for teaching threshold level English. A limited set of categories of verbal communication are determined. High frequency or critical functions are listed for each category. The lists of functions are not intended to be exhaustive, but represent a deliberate attempt to select functions based on the concept of threshold level and minimally required performance.

In the present job-oriented approach, six categories of verbal communication are used:

1.0: Report, express, and inquire about factual information

2.0: Report, express, and inquire about intellectual attitudes

3.0: Report, express, and inquire about emotional attitudes

4.0: Report, express, and inquire about getting things done (Suasion)

5.0: Engage in social rituals

6.0: Managing communication

The functions list for these six categories were listed earlier in Section IV (pp. I.41-I.43). With functions lists developed, elements must be supplied with the assistance of native speakers and linguists. The functions with their elements make up the Functions Catalog for the particular target language. Guiding the development of the functions list and the generation of language elements are the Operational Definitions for each function. The Operational Definitions include the function category and number, a list of synonyms for the function, a constitutional definition, English examples of verbal data, English examples of functions catalog entries, and comments (instructions). Figure 9 (p. I.73) depicts the governing relationship of the operation definition of Function 4.6 with the elements of Function 4.6 in the English Functions Catalog.

Technical roles, in essence, supply the job holder with the appropriate language elements to more nearly approximate the linguistic register required in the conduct of his/her job performance. Six technical roles are employed by the

FROM OPERATIONAL DEFINITIONS TO ELEMENTS IN THE FUNCTIONS CATALOG: AN EXAMPLE

Function 4.6: Report, Express, and Inquire about Directions/ Instructions/Commands

Function 4.6 Report, express or inquire about directions	
Function category 4.Report, express or inquire about getting things done (suasion)	
Synonyms	Order, charge, command
Definition	-to request with authority; to give an order/instruction to be carried out by another -to command
English examples of verbal data	Immobilize the broken limb. Do not begin until the signal is sounded. Memorize this message. *I want you to get this to headquarters immediately.
Comments	Assumes speaker has authority within the transaction; speaker may or may not have authority outside the transaction. *Note difference between function 4.6 and function 3.8--Report, express, or inquire about want.
English examples of function catalog entries	imperatives I want you to + VP

Operational Definition for Function 4.6

Elements from the English Functions Catalog for Function 4.6

.15 $\underline{DO} + NP + \left\{\begin{matrix}\underline{WARN}\\ \underline{CAUTION}\\ \underline{TELL}\end{matrix}\right\} + NP + \left\{\begin{matrix}\emptyset\\ \underline{that} + S\\ \underline{about} + NP\end{matrix}\right\}$?

EX: Did you tell them that the pipes are leaking gas?

4.6 report, express, or inquire about directions/instructions/commands

.1 $\left(NP + \left\{\begin{matrix}\underline{SAY}\ (that)\\ \underline{TELL} + NP + (that)\\ \underline{ASK}\ if\end{matrix}\right\}\right) + NP + \left\{\begin{matrix}\underline{ORDER}\\ \underline{TELL}\\ \underline{COMMAND}\\ \underline{INSTRUCT}\end{matrix}\right\} + NP + (NEG) + VP$

EX: They asked if we instructed him not to leave his post.
We told them to bring paper.

express:

.2 IMPERATIVES, both positive and negative

EX: Wild Bill, wait for me!

.3 I want you + VP

EX: I want you to take over the cooking.

inquire about:

.4 Is that an order?

.5 $\underline{BE} + NP + \left\{\begin{matrix}ordering\\ telling\\ commanding\\ instructing\end{matrix}\right\} + NP + (NEG) + VP$?

EX: Are they ordering me not to stop?

system: Commander; Instructor; Advisor; Advocate; Questor; and Aide. One of the roles will operate in every language situation involving direct verbal contact between the job holder and one or more speakers of the target language.

Role elements consist of words, phrases, and sentences for each function listed in categories 2.0 Intellectual Attitudes, 3.0 Emotional Attitudes, and 4.0 Getting Things Done (Suasion). Each element is further classified as polite, neutral, or brusque. There is a great deal of overlap between some of the elements across roles. That is, many polite, neutral, or brusque statements within a function are the same for more than one role. Appendix C has example pages from the Instructor Rolebook for Mandarin Chinese.

Synthesis Stage

Once the Functions Catalog and any required rolebooks have been developed, the elements can be seeded into the EO Worksheets beside the functions identified as required to accomplish a communicative event. The elements selected are those most directly useful to the particular event. These elements form the basis for determining language content for testing.

Following the completion of the EO Worksheet, the TSO Map with all supporting documentation, specialized vocabulary, and training sequence recommendations are developed. After the final review and modifications, the TSO/EO package is assembled. On the following pages are the TSO Map and EOs for the TSO 11BF.SF/C.7.02/RU: Demonstrating the Care and Use of the M60 Machinegun.

TSO Map

TSO 11B.SF / C.7.02 / RU

M.01

RECOMMENDED TRAINING SEQUENCE

NA 1 (2) 3 4 5 6 7 8 9 10

SEQUENCE TYPE

- ☐ linear
- ☑ hierarchical
- ☐ solitary

PRIMARY DECISION FACTOR

- ☐ job criticality
- ☑ dependent relationship
- ☐ independent relationship

REQUIRED SUPPORT MATERIALS

Enabling Objectives: EO Demonstrate C.7 /1-6

Functions Catalog: Russian

Rolebooks: Instructor (Russian

Special Vocabulary: See Vocabulary Indices (T.04)

Technical Documents: Machinegun 7.62-MM, M60, FM 23-67

DESIRED ENTRY BEHAVIOR

"Able to satisfy routine social demands and limited work requirements. Can handle with confidence but not with facility most social situations including introductions and casual conversations about current events, as well as work, family, and autobiographical information; can handle limited work requirements, needing help in handling any complications or difficulties; can get the gist of most conversations on non-technical subjects (i.e. topics which require no specialized knowledge) and has a speaking vocabulary sufficient to express himself simply with some circumlocutions; accent, through often faulty, is intelligible; can usually handle elementary constructions quite accurately but does not have thorough or confident control of the grammar." Army Regulation 350-20

ENABLING OBJECTIVES: Scope and Sequence Chart

Communicative Activity: "DEMONSTRATES"

INTRODUCING THE DEMONSTRATION
Gain attention
3.7/5.5.1/6.1.1/6.2/6.3
Motivate
2.6/2.8/3.10.1/4.1
State learning objectives
1.1/1.2
Provide overview of activities and/or procedures
1.1/1.2/3.7/6.2
Explain evaluation
2.5.1/2.5.2/2.8/3.10.1

PROVIDING EXPLANATION
Issue warnings and cautions
4.5/2.4.1
Identify parts and label them
1.1/1.2
Identify steps in a procedure
1.1/1.2/4.6/6.2

DEMONSTRATING
Make comments on modeled actions
2.3.1/2.3.2/2.4.1/2.4.2/2.6/3.10.1/4.5/4.6
Make comments on procedures
2.3.1/2.3.2/ 2.4.1/2.4.2/2.6 3.10.1/4.5/4.6

SUPERVISING STUDENT PERFORMANCE
Answer questions
1.1/1.2/4.6/4.4/4.7
Acknowledge emotional attitudes
3.1.1/3.1.2/3.3.1/3.3.2/3.10.1/3.10.2
Provide supportive correction
3.2.1/4.1/4.4/4.7

EVALUATING PERFORMANCE
Ask questions
1.3/2.5.1/2.11
Express approval/disapproval
3.9.1/3.9.2
Provide assessment
1.1/1.2/3.2.1/3.2.2/4.7

PROVIDING GUIDANCE
Encourage questions
6.9
Answer questions
1.1/1.2/2.4.1/2.4.2/2.5.1/2.5.2/2.12.1/2.12.2/2.13/3.10.1/3.10.2
Acknowledge emotional attitudes
3.1.1/3.1.2/3.3.1/3.3.2/3.10.1/3.10.2
Provide supportive correction; recommend; caution
3.2.1/4.1/4.2/4.5/4.7

E.01

ENABLING OBJECTIVE C.7.1 INTRODUCING THE DEMONSTRATION

RUSSIAN

SKILL DEVELOPMENT — LINGUISTIC KNOWLEDGES — COMMUNICATIVE PRACTICE

MacroSTANDARDS Communicative Activity "DEMONSTRATES"	MicroSTANDARDS (Functional Elements)	COMMENTS AND ADDITIONAL INFORMATION
INTRODUCING THE DEMONSTRATION		SALUTATION/INTRODUCTION - INCLUDE JOB TITLE
A. Gain attention		
The student attention using the following functions:		The student should use the appropriate Rolebook as a Job Performance Aid in order to effect the proper style and register through a variety of specific role statements.
6.1.1 interrupt	6.1.1: 1/4/6	The student must have command of a number of stock phrases such as:
5.5.1 introduce oneself	5.5.1:	
3.7 express intention	3.7: 2/3/4/5/6/8	"May I have your attention, please."
6.2 sequence communication	6.2: 1/2/3/5/6	"If everyone is ready, let's get started."
6.3 refocus or adjust communication	6.3: 2/4/7/8	The student will employ with automatice fluency such instructional introductions as:
B. Motivate		"The objectives for this session are as follows."
The student will motivate the aduience by pointing out how the learning will be relevant to their needs, meaningful to their job tasks, or in some other manner proven effective for the target audience. The student will use functions:		"There are three objectives for this lesson."
		"At the end of this session, you should be able to do three things."
2.6 need	2.6: 1/2/3/4/7	"Given_____, you should be able to _____."
2.8 obligation	2.8: 2/3/4/5/7/9/10/11	
3.10.1 importance	3.10.1: 1-7	
4.1 suggest	4.1: 2/4/5/6/7/10 2/4-7/10	

ENABLING OBJECTIVE C.7-1 INTRODUCING THE DEMONSTRATION

RUSSIAN

SKILL DEVELOPMENT MacroSTANDARDS Communicative Activity "DEMONSTRATES"	LINGUISTIC KNOWLEDGES MicroSTANDARDS (Functional Elements)	COMMUNICATIVE PRACTICE COMMENTS AND ADDITIONAL INFORMATION
C. State learning objectives		
The student will state learning objectives in behavioral (what the learner will do) terms. S/he will use the following functions:		The student must be able to verbally state learning objectives in action hands-on terms in the target language.
1.1 identify objects, persons, processes	1.1: 1-16	
1.2 state factual information	1.2: 1/2	
D. Provide overview of activities and/or procedures	1.3: 1-5	
The student will describe in order the events that will take place during the presentation or group activities. S/he will use functions:		This overview works as an "advanced organizer" for the steps and activities to be performed by the learner.
1.1 identify objects, persons, processes	1.1: 1/16	
1.2 state factual information	1.2: 1/2	
3.7 intention	3.7: 2/3/4/5/6/8	
6.2 sequence communication	6.2: 1/2/3/5/6	
E. Explain evaluation		
The student will describe the reason for evaluation, the process of finding out if the objectives can or cannot be performed by the adulence (learners). It is explained as an obligation on the part of the presenter and the learner.		The evaluation should be presented as everyone's responsibility. The evaluation should be viewed as non-threatening.
2.8 obligation	2.8: 2/3/4/5/7/9/10/11	
2.5.1 capability	2.5.1: 1/2/3-8/10-12	

I-77

E.01

ENABLING OBJECTIVE C.7-1 INTRODUCING THE DEMONSTRATION

RUSSIAN

SKILL DEVELOPMENT | LINGUISTIC KNOWLEDGES | COMMUNICATIVE PRACTICE

MacroSTANDARDS Communicative Activity "DEMONSTRATES"	MicroSTANDARDS (Functional Elements)	COMMENTS AND ADDITIONAL INFORMATION
2.5.2 incapability 3.10.1 importance	2.5.2: 1-9 3.10.1: 1-7	

ENABLING OBJECTIVE C.7-2 PROVIDING EXPLANATION

RUSSIAN

SKILL DEVELOPMENT | LINGUISTIC KNOWLEDGES | COMMUNICATIVE PRACTICE

MacroSTANDARDS Communicative Activity "DEMONSTRATES"	MicroSTANDARDS (Functional Elements)	COMMENTS AND ADDITIONAL INFORMATION
PROVIDING EXPLANATION		
A. Issue warnings and cautions		
The student will point out any parts or procedures that could cause a safety hazard endangering health, equipment, or environment. S/he will use functions:		Safety is a required procedure.
4.5 warnings	4.5: 2-10	
2.4.1 possibility	2.4.1: 2/3/7/8	
B. Identify parts and label them		
The student will identify the various parts of equipment, tools, machinery, and the like, using simple sentence constructions as found in functions:		Training aids, labeled diagrams are often most helpful here.
1.1 identify objects, persons, processes	1.1: 1-16	
1.2 state factual information	1.2: 1/2	
C. Identify steps in a procedure		
The student will list in order the steps in the procedure to be learned using functions:		
1.1 identify objects, persons, processes	1.1: 1-16	
1.2 state factual information	1.2: 1/2	
4.6 directions/instructions/commands	4.6: 1-5	
6.2 sequence communication	6.2: 1/2/3/5/6/7	

E.01

ENABLING OBJECTIVE C.7-3 DEMONSTRATING

RUSSIAN

SKILL DEVELOPMENT | LINGUISTIC KNOWLEDGES | COMMUNICATIVE PRACTICE

MacroSTANDARDS Communicative Activity "DEMONSTRATES"	MicroSTANDARDS (Functional Elements)	COMMENTS AND ADDITIONAL INFORMATION
DEMONSTRATING		
A. Make comments on modeled actions		
During the demonstration, performed by the student or one or more assistants, the student will point out critical things to remember, practice, or perform that ensure successful performance of the learning task. S/he will employ the following functions:		Throughout this task, functions 1.1 and 1.2 are used. The critical learning in this EO is the mastery of the other functions. Often the explanation and demonstration can be combined as one activity.
2.3.1 remembering	2.3.1: 1-11	
2.3.2 forgetting	2.3.2: 1-6/9/10	
2.6 need	2.6: 1/2/3/4/7	
3.10.1 importance	3.10.1: 1-7	
4.5 warnings	4.5: 2-10	
4.6 directions/instructions/commands	4.6: 1-5	
2.4.1 possibility	2.4.1: 1-13	
2.4.2 impossibility	2.4.2: 1-10	
B. Make comments on the procedures		
The student will point out the elements within each step of a procedure that are critical to successful performance. S/he will use functions:		
2.3.1 remembering	2.3.1: 1-11	

ENABLING OBJECTIVE C.7-3 DEMONSTRATING

RUSSIAN

SKILL DEVELOPMENT LINGUISTIC KNOWLEDGES COMMUNICATIVE PRACTICE

MacroSTANDARDS Communicative Activity "DEMONSTRATES"	MicroSTANDARDS (Functional Elements)	COMMENTS AND ADDITIONAL INFORMATION
2.3.2 forgetting	2.3.2: 1-6/9/10	
2.6 need	2.6: 1/2/3/4/7	
3.10.1 importance	3.10.1: 1-7	
4.5 warnings	4.5: 2-10	
4.6 directions/instructions/commands	4.6: 1-5	
2.4.1 possibility	2.4.1: 1-13	
2.4.2 impossibility	2.4.2: 1-10	

E.01

ENABLING OBJECTIVE C.7-4 SUPERVISING STUDENT PERFORMANCE

RUSSIAN

SKILL DEVELOPMENT | LINGUISTIC KNOWLEDGES | COMMUNICATIVE PRACTICE

MacroSTANDARDS Communicative Activity "DEMONSTRATES"	MicroSTANDARDS (Functional Elements)	COMMENTS AND ADDITIONAL INFORMATION
SUPERVISING STUDENT PERFORMANCE		
A. Answer questions		
The student will answer questions requesting information, clarification, or guidance by using functions:		Be sure to allot plenty of time for student practice.
1.1 identify objects, persons, processes	1.1: 1-16	
1.2 state factual information	1.2: 1/2	
4.6 directions/instructions/commands	4.6: 1-5	
4.4 advice	4.4: 3-13	A checklist or step-by-step chart is a useful instructor tool during supervision.
4.7 corrections	4.7: 2-6/9/10	
B. Acknowledge emotional attitudes		
The student will verbally acknowledge his/her understanding of emotional attitudes on the part of the questioner using functions:		
3.1.1 pleasure/liking	3.1.1: 3-7	
3.1.2 displeasure/dislike	3.1.2: 1/5-8/11	
3.3.1 fear	3.3.1: 1-6	
3.3.2 worry	3.3.2: 1-7	
3.10.1 importance	3.10.1: 3-7	
3.10.2 unimportance/indifference	3.10.2: 1/4/5/6/8	

ENABLING OBJECTIVE C.7-4 SUPERVISING STUDENT PERFORMANCE

RUSSIAN

SKILL DEVELOPMENT	LINGUISTIC KNOWLEDGES	COMMUNICATIVE PRACTICE
MacroSTANDARDS Communicative Activity "DEMONSTRATES"	MicroSTANDARDS (Functional Elements)	COMMENTS AND ADDITIONAL INFORMATION
C. <u>Provide supportive correction</u> The student will make supportive corrections of learners' performance of the task using functions:		It is important to correct the learner in ways that build confidence.
3.2.1 satisfaction	3.2.1: 5-9/11-13	
4.1 suggestions	4.1: 2/4/5/6/7/10	
4.4 advice	4.4: 3-13	
4.7 corrections	4.7: 1-10	

E.01

ENABLING OBJECTIVE C.7-5 EVALUATING PERFORMANCE

RUSSIAN

SKILL DEVELOPMENT MacroSTANDARDS Communicative Activity "DEMONSTRATES"	LINGUISTIC KNOWLEDGES MicroSTANDARDS (Functional Elements)	COMMUNICATIVE PRACTICE COMMENTS AND ADDITIONAL INFORMATION
EVALUATING PERFORMANCE		
A. <u>Ask questions</u> The student will ask questions for the purpose of obtaining responses from learners who are being evaluated. These questions can be requests for information or invitations for the learner to perform all or parts of the task. The student will use functions:		Require the student work independently. Use an evaluation checklist.
1.3 seek factual information	1.3: 1-5	Remember! Student performance is a measure of validity of instruction.
2.5.1 capability	2.5.1: 1-4/6/7/8/10/11/12	
2.11 awareness	2.11: 2	Usually instructor will ask student about error made such as: "What function does that part have?"
B. <u>Express approval/disapproval</u> The student will verbally express approval for correct responses or actions on the part of the learner. The student will use verbal expressions of disapproval only under extreme or unusual circumstances. S/he will use functions:		
3.9.1 approval	3.9.1: 1-5	Review basic content and essential steps.
3.9.2 disapproval	3.9.2: 1-4	Remotivate the learner.
C. <u>Provide assessment</u> The student will tell the learner how s/he did on the learning task. The student will point out satisfactory and unsatisfactory performance, and make supportive corrections using functions:		

ENABLING OBJECTIVE C.7-5 EVALUATING PERFORMANCE

RUSSIAN

SKILL DEVELOPMENT | LINGUISTIC KNOWLEDGES | COMMUNICATIVE PRACTICE

MacroSTANDARDS Communicative Activity "DEMONSTRATES"	MicroSTANDARDS (Functional Elements)	COMMENTS AND ADDITIONAL INFORMATION
1.1 identify objects, persons, processes	1.1: 1-16	
1.2 state factual information	1.2: 1/2	
3.2.1 satisfaction	3.2.1: 5-9/11-13	
3.2.2 dissatisfaction	3.2.2: 1/2/4-8	
4.7 corrections	4.7: 1-10	

I-85

E.01

ENABLING OBJECTIVE C.7-6 PROVIDING COMMUNICATIVE GUIDANCE

RUSSIAN

SKILL DEVELOPMENT | LINGUISTIC KNOWLEDGES | COMMUNICATIVE PRACTICE

MacroSTANDARDS Communicative Activity "DEMONSTRATES"	MicroSTANDARDS (Functional Elements)	COMMENTS AND ADDITIONAL INFORMATION
PROVIDING COMMUNICATIVE GUIDANCE		This EO is common to "BRIEFS", "DEMONSTRATES, and "TEACHES". Consequently, mastery of providing communicative guidance is a critical EO in general.
A. Encourage questions		
The student will encourage questions during, after, or during and after the presentation. S/he will use:		A number of "human skills" are at play in providing guidance. For special use of style or mood, the student should develop some of his language from the appropriate Rolebook.
6.9 request questions and/or comments	6.9: 1-4	
B. Answer questions		
The student will answer factual questions using functions:		Answering factual questions may require some or all of the strategies employed in S.3-2 INTRODUCING KEY TERMS.
1.1 identify objects, persons, processes	1.1: 1-16	
1.2 state factual questions	1.2: 1/2	In thought and opinion questions, introductory phrases should be learned such as:
2.10.2 affirmation/confirmation	2.10.2: 1/4-7	"It is possible that..."
4.7 corrections	4.7: 1-10	"We found it can be done for the following reasons."
The student will answer questions requiring the expression of thoughts or opinions by using:		
2.4.1 possibility	2.4.1: 1-13	
2.4.2 impossibility	2.4.2: 1-10	
2.5.1 capability	2.5.1: 1-4/6-8/10-12	
2.5.2 incapability	2.5.2: 1-6	
2.12.1 difficulty	2.12.1: 1-3/6-10/12/14	

ENABLING OBJECTIVE C.7-6 PROVIDING COMMUNICATIVE GUIDANCE

RUSSIAN

SKILL DEVELOPMENT MacroSTANDARDS Communicative Activity "DEMONSTRATES"	LINGUISTIC KNOWLEDGES MicroSTANDARDS (Functional Elements)	COMMUNICATIVE PRACTICE COMMENTS AND ADDITIONAL INFORMATION
2.12.2 ease	2.12.2: 1-8	
2.13 belief/opinion	2.13: 1-12	
3.10.1 importance	3.10.1: 1-7	
3.10.2 unimportance/indifference	3.10.2: 1/4/5/6/8	
3.1.1 pleasure/liking	3.1.1: 3-7	
3.1.2 displeasure/dislike	3.1.2: 1/5-8/11	
3.6 preference	3.6: 1-5/8	
4.7 corrections	4.7: 1-10	
C. Acknowledge emotional attitudes		
The student will acknowledge emotional attitudes on the part of questioners using functions:		This part, dealing with emotional attitudes, is especially tricky. It requires much practice, cultural knowledge, and knowledge of the audience.
3.1.1 pleasuring/liking	3.1.1: 3-7	
3.1.2 displeasure/dislike	3.1.2: 1/5-8/11	
3.3.1 fear	3.3.1: 1-6	
3.3.2 worry	3.3.2: 1-7	
3.5 surprise	3.5: 2-11	
3.2.1 satisfaction	3.2.1: 5-9/11/13	
3.2.2 dissatisfaction	3.2.2: 1/2/4-8	

E.01

ENABLING OBJECTIVE C.7-6 PROVIDING COMMUNICATIVE GUIDANCE

RUSSIAN

SKILL DEVELOPMENT — LINGUISTIC KNOWLEDGES — COMMUNICATIVE PRACTICE

MacroSTANDARDS Communicative Activity "DEMONSTRATES"	MicroSTANDARDS (Functional Elements)	COMMENTS AND ADDITIONAL INFORMATION
3.10.1 importance	3.10.1: 1-7	
3.10.2 unimportance/indifference	3.10.2: 1/4/5/6/8	
D. Provide supportive correction; recommend; caution		
The student will employ supportive (non-abrasive) correction, give recommendations, and provide cautions and warnings (generally about safety or procedures) using functions:		This is also an area where human skills play a large part.
3.2.1 satisfaction	3.2.1: 5-9/11-13	
4.1 suggests	4.1: 2/4-7/10	
4.2 requests	4.2: 2/3/5/6/8/10-12/14/15	
4.5 warnings	4.5: 2-10	
4.7 corrections	4.7: 1-10	

ENABLING OBJECTIVES METHODOLOGY

Throughout the communications analysis, the language analysis, and the final synthesis of the two, the data must be tracked, monitored, and controlled. This is the responsiblity of the EO Methodology. The EO Methodolgy, like the task analysis and TSO methodologies, has two components: a Data Control Algorithm and the Procedures (the set of human operations).

The process of developing EOs begins with research on the communicative activity embedded in the job task. This research is constantly focused on how to train someone to exhibit this set of communicative behaviors. The next series of operations is to deduce the language functions and their elements. These operations result in the Functions Catalog for the target language. Finally, the synthesis of communication and language takes place through the listing of appropriate elements beside the communicative activity on the EO Worksheets. After review and modification, the TSO is mapped to the EO set.

The two decision points in the Data Control Algorithm allow for the immediate incorporation of development activities that have taken place in prior communicative or language analysis.

The "operational blocks" within the Data Control Algorithm are carried out by the procedures governed by each block. These sets of "human operations" are those needed to conduct the communications and language analyses and develop the EO sets. Each of the operational blocks and its procedures is given on the following pages.

RESEARCH COMMUNICATIVE ACTIVITY

Procedures

- study the communicative activity embedded into the TSO or similar TSOs for the job/duty position.
- review any EO sets previously developed for the same communicative activity.
- keep on hand a listing of functions previously used in developing communicative activities.
- collect documents, training materials, textbooks, and studies that concern the method of conducting the communicative activity. For example, if the TSO shows that the job holder is required to instruct, then gather materials on the type of instruction required--lecture, demonstration-performance method, discussion method, etc.
- review the relevant materials to establish possible strategies for carrying out the communicative activity in the job environment.

Comments:

"The development of TSOs reflects final training skills needed to deal with the concrete specifics of reality. The development of EOs is derived from a plan to ensure that the student acquires the necessary skills. There are many ways to slice a pie. There are many possibilities for determining sound EOs or strategic training plans. Consequently, there will be more variance between the number and type of EOs even when analysts use the same system. That's okay. In constructing a plan there is always an interaction between empirical data and the analyst's training philosophy."

DEVELOP AND BREAKDOWN THE COMMUNICATIVE ACTIVITY

Procedures

- determine the logical organization of the communicative activity. For example:

Briefing	Business Letter
problem statement	heading
definition of terms	inside address
background	salutation
alternative solutions	body
recommendation	complimentary close
	signature
	postscript

- determine an appropriate communicative strategy for carrying out the communicative activity, i.e., in a briefing there are also introductory remarks, gaining attention, acknowledgements, soliciting feedback for regulating speed and volume, and question answering. (These additional operations together with the logical order of the activity make up the complete communicative strategy.)

- partition the strategy into learning blocks, e.e., the events that form a logical "step" in the communicative activity.

- determine additional learning steps, such as providing a new communicative strategy.

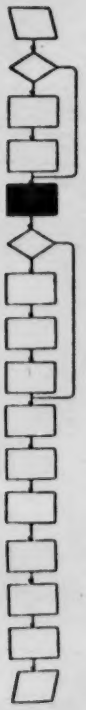
- supply the language functions by which the job holder can express or comprehend the most critical verbal operants in each learning block. (These functions become the primary indices of performance to be measured by the CRT.)

Comments:

"When working with a communicative activity it becomes readily apparent that language training and job training are not separate programs but merge together with such overlapping that the line between them is completely obscured."

"Be mentally prepared to become an SME yourself."

REVIEW, MODIFY, AND INSERT DATA ON EO WORKSHEETS



Procedures

- conduct a simulation try-out of the communicative activity.
- work out any "bugs" in the activity with a group of three or four. (An SME, a course developer, and a CRT developer is an optimal mix.)
- reach a group decision on each learning block with respect to delineation of a logical learning step.
- reach a group decision on necessary function categories required for test purposes.
- make recommended changes and fill out the EO Worksheets (E.01).
- assign the communicative activity number to the EO Worksheet and provide each learning block with a consecutive identification number starting with 1.

Comments:

"The learning block, when completely filled in for a particular language and TSO becomes an EO."

"If the communicative activity has been developed previously, this entire operation can be done in a day."

REVIEW THE OPERATIONAL DEFINITIONS OF FUNCTIONS

Procedures

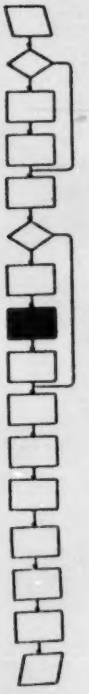
- before starting the language analysis, review the targeted TSOs and EOs.
- review the functional categories and their operational definitions for completeness.
- search the literature on the functional-notional approach for other functions or organizational schemes that might be useful in determining the functions required for the job/duty position(s) under analysis.
- make a list of possible functions and supply operational definitions for them.
- modify, add, or delete functions (only if possibly critical to testing of performance for the job/duty position).

Comments:

"Most of the substantive work using the functional-notional approach has been done under the direction of the COUNCIL OF EUROPE. Articles and examples of this approach are appearing here and there in the U.S. now."

"The particular functions scheme developed for this system attempts to capture a way of determining test indices for job-oriented language training. Consequently, there tend to be fewer function categories with many more elements--from structures to sentences and phrases."

DEVELOP FUNCTIONS CATALOG AND ROLEBOOKS



Procedures

- organize the functions categories for element generation.
- determine from the TSOs if any augmenting roles are required.
- array the categories, supply a numbering system, and coordinate the basic functions categories for the catalog with those for the rolebooks.

Comments:

"This is really more of a thorough preparation stage before bringing in native speakers of the target language."

LIST ELEMENTS

Procedures

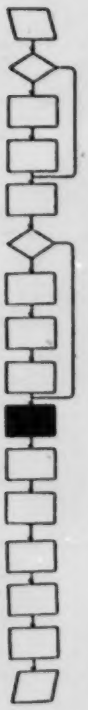
- use native speakers to generate elements for the functions catalog--example sentences, phrases, structural patterns that permit adequate capability to express each function.
- have native speakers generate elements without regard to priority, frequency, relevance, representativeness, or difficulty.
- have native speakers generate expressions, phrases and sentences for each category in each rolebook. These elements are usually surface structures (complete utterances) that reflect the linguistic register or style required of the particular role.

Comments:

"Don't have sessions with native speakers last longer than two hours. Generate elements for the functions really screws up your mind. Try it in English sometime."

"Try not to give examples in English when you are working with a native speaker. It influences the way they think and often will lose their native 'feel' for the function. This is true every time."

REVIEW AND MODIFY THE FUNCTIONS CATALOG AND ROLEBOOKS



Procedures

- have other linguists and native speakers individually review the elements to change, modify, and prioritize them for the functions catalog and the rolebooks.
- use a small group of linguists and native speakers to conduct a final review.
- check for functional category necessity.
- check for functional element sufficiency.
- check for role element for cultural sensitivity.
- make the required changes and produce a working draft.

Comments:

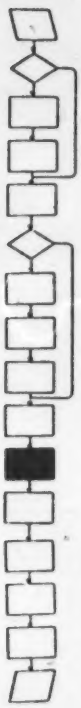
"Again, two hours are about all a person can take when working on the catalog or rolebooks."

"This process is not one that can be done in two or three days. The review process is a very serious and creative undertaking."

"Make sure those people selected for small-group review not only have the technical expertise but the emotional temperament to work within a 'team concept'. That means you are looking for task-oriented, team-spirited, creative people with native or near-native target language competency. That's a difficult combination to find."

"Set both objectives and rules of behavior for every review session. The review panel needs to clearly understand not only what is the intended outcome, but how they are expected to behave."

SEED FUNCTIONAL ELEMENTS INTO THE EO WORKSHEET



Procedures

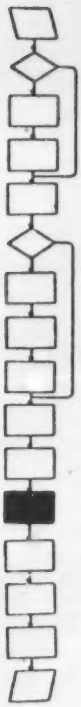
- with the aid of a native speaker determine the priority elements for each function listed in the learning blocks of the communicative activity on the EO Worksheets.
- try to delimit the elements to establish testing parameters.
- fill in the elements (by their number designation) on the EO Worksheets.

Comments:

"The temptation is to think up all kinds of situations where every element could be used. This defeats the purpose of trying to capture the critical, absolutely necessary language required for satisfactory job performance."

"Occasionally, a TSO might require a "special" EO set. That is, the task is so language specific that it can be written up as a unique routine. A case in point is when 91B Medical Specialists conduct sick calls. Almost every language statement for any situation can be listed. 96C Interrogators have some comparable tasks, as do monitors of stereotypic radio traffic."

REVIEW THE COMMUNICATIVE ACTIVITY AND FUNCTIONAL ELEMENTS



Procedures

- coordinate the functional elements with the specialized vocabulary required for each learning block.
- check the elements for sufficiency in "presenting" the specialized vocabulary during communication.
- use the COMMENTS column on the EO Worksheets to solve any problem with fitting functional elements and vocabulary together.

Comments:

"Now, with the functional elements listed and the COMMENTS section completed you have EOs rather than learning blocks."

"The term 'learning block' was used to mark the difference between a communicative activity that has been developed and logically broken into ordered steps and that same communicative activity breakdown focused on a specific TSO."

COMPLETE THE EO CHECKLIST

Procedures

- compile all documents and support materials
- check for the following:
  - ☐ copy of the TSO
  - ☐ vocabulary indices
  - ☐ functions indices
  - ☐ target language functions catalog
  - ☐ rolebooks (if applicable)
  - ☐ EO set for the TSO
  - ☐ field manuals, technical manuals, glossaries, target language documents, books, examples of job products, etc.

Comment:

"When compiling support documents, don't put together a big stack of documents, FMs, TMs, glossaries, and so forth, but duplicate the relevant sections with a copy machine. Organize and index them for easy access."

MAP TSO TO EO SET

Procedures

- fill out the TSO Map.
- recommend a training sequence for all the TSOs in the job/duty position.
- list the required support materials:

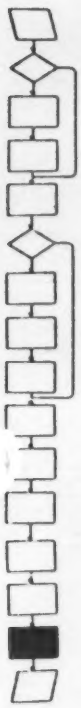
  EO set
  function catalog
  rolebooks
  specialized vocabulary
  technical documents

- place the communicative activity breakdown on the TSO Map in the square provided.

Comment:

"Mapping in the sense used in this project is a simple set of procedures, but the assumption underlying the operation is a powerful one. It allows you to route new empirically determined training needs (such as new TSOs) through previously developed learning paths (EOs). Imagine a small storehouse of validated EO sets ready to accept any new TSO. Think of the economy of that approach! You do the same thing when you do a cut-and-paste job on existing materials for a specific training situation. Mapping is an attempt to operate on the assumption that there is a deeper and simpler set of relationships between training requirements and learning paths than is operationally assumed when the analyst develops an ad hoc set of EOs for each TSO, every time."

CONDUCT FINAL REVIEW



Procedures

- convene expert review panel.
- conduct a presentation of the TSO/EO materials.
- solicit comments, suggestions, recommendations.
- make changes as required.
- complete final draft.

Comments:

"The final review panel can't really go over each and every word of the material. They serve the purpose of looking at the broader picture, providing general guidance, recommending additional support materials needed, and assisting with implementation."

"Keep two copies of the final draft for your personal files, not one. Think about that for a moment."

SECTION VI: RECOMMENDATIONS

The recommendations to decision-makers on the management and implementation of the C/LOBS can be summarized in three short phrases:

- PLAN
- BE PROACTIVE
- FOLLOW-UP

The reader should keep these in mind while reading through the specific recommendations; each of them spells out one or more of those messages in detail. To successfully implement any new system, the manager needs both to be throughly familiar with the properties of the system, and to develop a management system to organize implementation strategies.

Nature of the system:

- The critical areas for decision-making are given in the decision diamonds in the three control algorithms (Task Analysis System, TSO Conversion Routine, EO System). The manager must also be throughly familiar with each operational block within the system.

- This system provides for a holistic view of the job, rather than a fragmented perspective. This gives management the opportunity to get a view of the central purpose of the job, and to make decisions with that purpose in mind.

- The C/LOBS is modular. Each of its components has an internal organization independent of any of the others. This means that each part of the system can be modified, de-bugged, tinkered with, or totally revamped without major repercussions to the rest of the overall system.

Implications for Implementation:

- The manager should be aware of the reaction continuum for any innovation--

immediate rejection to slavish adoption. The immediate rejectors may be heard to say "it'll never work" or "nothing does the job as well as the old way" or "I found a section that doesn't work; that proves it's all wrong." Managers should remember that this system, like any new machine will need de-bugging. Minor flaws that keep the system from operating at optimal efficiency will be discovered and corrected. The presence of "bugs" is not a valid reason for rejecting the system as a whole. The manager should keep in mind the following points when de-bugging the system:

•What's the operational level of the problem? Does it concern a sub-procedure or an overall system component?

•Who's making the judgment? The same person will not be the best judge of adequacy for each level of system analysis. For example, TRADOC systems personnel would be the best judges of C/LOBS congruence with IPISD guidelines.

•At the other end of the rejection-adoption continuum is slavish adherence of the system. Some people jump at any new model or procedure as the panacea or magic formula that will solve all their problems--if only they follow it to the letter. The C/LOBS solves the problem of determining speaking/listening objectives better than others, e.g., poetry reading objectives. Although the principles underlying the C/LOBS are powerful, the procedures for carrying out the analysis may vary according to context. Like the IPISD, it works better when complemented with imagination and common sense.

•Successful implementation of this system depends on deliberate planning. Plans must be detailed, concrete, and include short-, medium-, and long-term timetables:

•For each planned implementation effort, a specific planned action should be linked with a particular goal.

•Each action-goal statement should be rounded off with a clear description of the situation that will exist if the action has accomplished the goal.

•User Agency decision-makers must be included in the implementation process.

•For each planned implementation step, the manager should brief high level User Agency decision-makers on the proposed change, and actively solicit their comments, feedback and suggested modifications. Make sure that the User Agency decision-makers that will be affected by the change have approved it before implementation begins.

•Remember that successful implementation takes time. Sets of long-, medium-, and short-term goals and strategies are necessary to make sure that implementation efforts stay on the right track throughout the long process and that progress points along the way can be anticipated and noted when they occur.

Strengths and weaknesses

•The C/LOBS is a fairly complex system. It is designed to be adequate to handle the military job with the most extensive language requirement. Of course, that means that it will also handle jobs with very simply-specified requirements.

•The above means that the system is most cost-effective when it's used to analyze a complex job. It may be a waste of time/dollars to proceed through every step of the system in cases where the language requirement is well-known and easily stated.

•The C/LOBS prespecifies the output of the task analysis. The structure of the interview, survey, and observation instruments ensure that certain kinds of information in certain formats will be captured and arrayed. This means that the task analyst knows exactly where s/he's headed and how to get there - that's an advantage. On the other hand, some valuable information not asked for in the data collection instruments may be missed without well-trained analysts.

•The system assumes commonalities between jobs. It divides jobs into components, and then prescribes instructional development at the component level.

In the long run, this is more cost-effective than an approach which treats each job as unique and starts from scratch every time.

●Because the task analysis methodology provides for three data collection instruments: the interview, observation, and survey, some analysts may decide to go the quick and dirty route--just mail out the survey and wait. In almost every case, this will be a mistake. Direct and personal interaction with User Agency personnel at all levels is paramount to the success of any instructional development effort.

Relations with the User Agency

●It is extremely important to develop and maintain credibility with the User Agency. The User Agency is your client, not an obstacle to progress. There are two cardinal rules for dealing with the User Agency: (1) keep them informed and (2) take their input seriously.

●Use the power structure in the User Agency to facilitate contact and cooperation. Make sure the task analyst clears his/her plans with the right people in the User Agency, briefs decision-makers, and follows up with reports of his/her progress.

●Carefully select personnel to make site visits. A site visit is not an easy task, it's a diplomatic mission. Site visit team members should be well-informed, prepared, respectful but not obsequious, and ready to conform to the needs/schedules of User Agency staff when necessary.

●Before a site visit, prepare. Take along material you've developed relevant to the MOS that shows that you've done your homework and won't be wasting their time.

●Take along products typical of this kind of project, even if they are from a different MOS or language, to show them where the analysis is headed.

Their reaction can provide an early warning of possible conflict with User Agency ISD formats.

- Follow up survey administration and site visits with periodic contacts with the User Agency until the project is finished. Be sure to submit draft versions to the User Agency for recommendations and revisions. Don't surprise them with the final product!

Task Analysis/Course Development

- The output of the C/LOBS does not specify instructional strategies. Don't try to restrict course developers or instructors unnecessarily - let them use their creativity and common sense in devising instruction that accomplishes the objectives.

- The C/LOBS system is arranged so that the analyst can function adequately within the system without technical knowledge in esoteric fields. However, besides knowledge of general task analysis procedures, the analyst needs skills in the following areas:

  - interviewing and observation strategies
  - User Agency organizational systems and how to work with them
  - decision-making from descriptive, rather than inferential, statistics

Training in these skill areas may be necessary.

A Final Recommendation

Our final recommendation is concerned with the sensitive area of performance standards. Many people confuse performance standards with criterion-referenced tests. The standard is the criterion. The test measures adequate or inadequate performance to the criterion. User Agencies are often held responsible for the determination of standards. From our experience, we have concluded that User Agencies, in the main, can better evaluate a performance standard for language than develop it from scratch. Often unfamiliar with the technical problems of

language training development and the DLIFLC in-house procedures, the User Agency can become frustrated by the magnitude of the problem of determining performance standards. Expecting a User Agency to supply performance standards sufficient for CRT development is not reasonable, at least not realistic. Therefore, we recommend that:

*Task analysts assume the responsibility for initial determination of performance standards for TSOs.

*Task analysts "logically" validate these standards with in-house and User Agency decision-makers and MOS holders.

CRT developers, whose activities parallel those of the task analysts, are routinely familiar with developing initial CRTs, modifying on the basis of MOS-holder feedback, coordinating with course development and faculty, conducting student trials, and job performance follow-up. Essentially, we advocate that the same approach to performance standards be taken by task analysts.

Although language training to some acceptable criterion is not new, the rigor and precision required of the ISD approach to language learning is most recent. Excessive overtraining, as an insurance policy against inadequate analysis, is as unacceptable as undertraining to meet mission requirements. Task analysts must be the moving force behind the design, development, and validation of performance standards.

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Appendix A: Communicative Roles

The notion of ROLES deals with communicative behavior from the perspective of the human transactions which occur during a linguistic exchange. The ROLES framework delineates the human relationships within and outside of the linguistic interchange. It specifies the relationships among TECHNICAL ROLES within an exchange, communicative activities, and various job parameters. It lays out the implications of those relationships for language type and register, and ultimately for the grammar and vocabulary needed for the job.

The matrix which follows shows dimensions on which the human relationships in a transaction can vary. They combine to define TECHNICAL ROLES. On the pages which follow are definitions of the TECHNICAL ROLES assumed by the MOS job holder in the course of his/her job performance. The array of ROLES presented is intended to be exhaustive; that is, one of the ROLES will be operative in every linguistic situation involving direct communicative contact between the job holder and another person or persons.

ROLE DIMENSIONS

	Commander	Instructor	Advisor	Advocate	Questor	Aide
Authority within	Outranks everyone else by definition	Outranks everyone else by definition	None	None	None	None
Responsible within	Total	For performance of learners beyond but within job	For providing best possible judgment	For providing best possible information	None	For smoothness of transaction
Evaluates performance of others within	Yes	Yes	Yes	No	Yes	Yes
Effects changes in performance of others within	Yes	Yes	If possible	If possible	No	Yes

1. Commander

- Outranks all other participants in transaction
- Directs others to perform in specified ways
- Evaluates performance of others
- Directs others to modify their performance at his (commander's) discretion
- Leads, inspires
- Is responsible totally for outcome of entire enterprise

2. Instructor

- Outranks all participants in the transaction
- Furnishes information/teaches
  - delivers knowledge
  - imparts skill
- Evaluates performance of learner
- Prescribes, when necessary, additional teaching
- Provides such teaching
- Is responsible for learner's performance in instructed activity beyond instructional transaction

3. Advisor

- Operates
  - from position as expert
  - only in response to request
- Passes on to requestor his (advisor's) judgment about best way
  - to approach requestor's problem
  - to deal with a situation brought by requestor
  - "best" may be
    - most effective
    - least expensive
    - within predetermined limits
      - fiscal budget
      - personnel resources
- Duties include
  - giving best possible advice
  - within limits of circumstances, e.g.,
    - ability of requestor to comprehend advice/information
    - government or company policies, e.g., classification
    - limitations on information flow
- Not responsible for execution of plan developed by requestor (except at requestor's request, at which point TECHNICAL ROLE of Instructor or Commander is assumed).

4. Advocate

- Operates as one who is knowledgeable though probably not expert
- Only in response to request for information
  - elicits more information, i.e., clear statement of requestor's needs/desires
  - passes such statement on to sources of information
  - elicits/obtains information from those sources
  - passes that information on to requestor
  - continues back and forth until
    - information approximates requestor's needs as closely as possible

    or
    - requestor tailors his needs to information available

5. Questor

- Gathers information as requested by employer
- Duties include the providing/gathering
  - all available, relevant information
  - in best possible form
  - at highest possible level of confidence (hardest, most trustworthy, etc.)
- Exercises judgment
  - in determining relevance of information
  - by commenting on information gathered, only at request of employer

6. Aide

- Facilitates communication at request of superior or peer in rank with the aim of effecting social solidarity
- Duties include

  protect requestor from embarrassment

  effect smoothness of transition

APPENDIX B: INITIAL LISTING OF DESCRIPTORS OF COMMUNICATIVE ACTIVITIES

COMMUNICATIVE ACTIVITIES	COMMUNICATIVE TASK IDENTITY NUMBER	REQUIRED LANGUAGE SKILLS	DEFINITION
1. Briefs	S.3	speaks	Gives final instructions to; provides information in a capsule form through speech. There is a requirement for specificity and a mild sense of urgency.
2. Converses	C.1	speaks/listens	Talks, interchanges thoughts, information, and opinions through speech.
3. Corresponds	W.1	writes	Writes letters and official notifications expecting or soliciting a response.
4. Demonstrates	C.7	speaks/(listens)	In an instructional environment, labels parts or components and shows how to operate, maintain, disassemble, or reassemble a piece of equipment, or the like.
5. Informs	S.2	speaks	Provides a desired body of information to others through speech; relays messages, data, and information.
6. Facilitates	C.6	speaks/listens	Summarizes and translates verbally oral communications for person(s) who are not knowledgeable in the language being spoken.
7. Gists	R.3	reads/writes	Provides written summaries in English of documents written in a foreign language.
8. Interprets	C.5	speaks/listens	Translates and facilitates communication through speech between two or more persons of differing language backgrounds.
9. Interrogates	C.4	speaks/listens	Questions others in their native language for the purpose of extracting data, information, and opinion in a structured environment.
10. Interviews	C.3	speaks/listens	Gathers information through speech for the purpose of forming opinion, making assessments or judgments on subsequent decisions. This environment is less structured and hostile than that of interrogation.

11.	Lectures	S.4	speaks	Formally presents information through speech for the purpose of instruction or providing detailed and organized information.
12.	Monitors	L.1	listens	Comprehends and mentally summarizes the main points of verbally transmitted information and data. One can monitor broadcasts, speeches, conversations of others, etc.
13.	Narrates	S.1	speaks/reads	Reads aloud from a script or document in the language of the printed material.
14.	Notes	L.2	listens/writes	Writes immediate summaries of information and highlights of an oral discourse.
15.	Prepares memoranda	W.3	writes	Writes memos, notes, and official notices in the target language.
16.	Prepares reports	W.2	writes	Writes more lengthy and formal material for specific consumers who are non-English speakers.
17.	Reviews	R.1	reads	Reads official documents or articles for the purpose of examining their contents with respect to some predetermined criteria or expanded informational need.
18.	Scans	R.2	reads	Quickly peruses written information, newspapers, articles to search for specific kinds of predetermined information.
19.	Takes dictation	L.3	listens/writes	Writes down oral discourse intended to be copied.
20.	Teaches	C.8	speaks/listens	In an instructional environment, uses the language more extensively to communicate ideas or concepts; can listen to and understand effectively the questions asked by students.
21.	Telephones	C.2	listens/speaks	Talks on the telephone with native speakers for the purpose of exchanging information and the like.

22.	Transcribes	L.4	listens/writes	Writes or types oral verbatim discourse. Such communication may come from records or any device that permits the transcriber to listen repeatedly to the verbal utterances.
23.	Translates	T.0	reads/writes	Provides a word-for-word or technically accurate transfer of information from one language into another.
24.	Digests	R.4	reads/writes	Reads documents, articles, or transcripts for the purpose of rendering key phrases, sentences, information, or thought into another language.
25.	Extracts	L.5	listens/(writes)	Listens to broadcasts, speeches, or conversations for the purpose of rendering key phrases, sentences, information, or thought into another language.

INSTRUCTOR ROLEBOOK

Functions List for Mandarin Chinese

Instructor: An Instructor by definition outranks all other participants in a transaction. He/she teaches, or imparts information, by delivering knowledge or by imparting skills to learners. The Instructor evaluates the performance of the learner, prescribes additional instruction if necessary, and provides the teaching needed. The Instructor is responsible for the learner's performance in the instructed activity beyond the limits of the instructional activity.

2.0 REPORT, EXPRESS, OR INQUIRE ABOUT INTELLECTUAL ATTITUDES

2.1.1 Report, express, or inquire about agreement

-你同意吗?

Polite

-你同意吗?
-当然同意.
-你的意見很好.
-是否大家都意見相同?

Neutral

-我同意.

Brusque

-真的.
-对啦.

2.1.2 Report, express, or inquire about disagreement

Polite

-虽然大部份人都同意你的看法,我沒办法同意.

Neutral

-你和×的意見相同吗?
-我不同意×的看法.
-你,不同意吗?

Brusque

-不对.
-你反对?

2.2.1 Report, express, or inquire about an offer

Polite

- 大概你对x会有兴趣。
- 我可以帮这个忙。
- 你是否对x有兴趣?
- 请你解释一下。

Neutral

- 你真的要x?
- 你想知道关于x的事情吗?
- 你要知道什么?我知道的话就告诉你。
- 你要不要帮忙?

Brusque

- 把x给我。
- 你还有什么问题?
- 你去不去x?

2.2.2 Report, express, or inquire about declining an offer

Polite

- 对不起,我不能接受。
- 我实在不敢当。
- 不敢当。
- 你真的不要我帮你x?

Neutral

- 谢了。
- 现在不需要了。
- 再说。(以後再说。)
- 难道你不要我x?

Brusque

- 你到底要不要x?
- 不要。
- 免了。

2.2.3 Report, express, or inquire about accepting an offer

Polite

- 多谢。
- 那太好了。
- 好极了。
- 你要我帮你x吗?

Neutral

- 好,谢谢你。
- 请便。
- 好不好?